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Differentials in the assignment of criminal status through sentencing

Albert Andrew Simkus

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DIFFERENTIALS IN THE ASSIGNMENT OF CRIMINAL

STATUS THROUGH SENTENCING

By

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B.A., University of Southwestern Louisiana, 1972

Presented in Partial Fulfillment of the Requirements for the
Degree of Master of Arts

University of Montana

1975

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This study examined differentials in the assignment of criminal status, as seen in the sentencing decision to defer the formal adjudication of guilt. Several theoretical models of the assignment of criminal status through sentencing were derived from the power-conflict perspective on criminalization, the ideal objectives of sentencing ideologies, and previous sentencing research. These models were then evaluated through comparisons with data regarding the sentences given 1553 probationers in the state of Montana.

Contingency table analysis, path analysis, and multiple classification analysis were used to assess the direct and indirect effects of various socio-biographical and legal offender attributes upon the conditional probability that an offender was adjudicated guilty. The observed effects of each of these attributes were then compared to the effects expected under the theoretical models of the assignment of criminal status.

The legal background attributes of the offenders were found to be the primary determinants of the type of sentence, thus the observed sentencing outcomes were largely consistent with the principle of equal treatment and the sentencing objectives of deterrence and retribution. However, small but significant discrepancies were associated with the socio-biographical offender attributes. Consistent with the objective of rehabilitation, the adjudication of guilt was negatively associated with educational achievement and positively associated with age. The finding that native Americans were more likely to be adjudicated guilty than similar white offenders was consistent with the power-conflict model, but the absence of differentials associated with socioeconomic status tended to contradict that model.
ACKNOWLEDGEMENTS

I wish to express special thanks to Edwin Hall who introduced me to the problem and data, and who was a valuable colleague in exploring these and related problems. The time and advice given by my advisor, Robert Balch, is also appreciated.

Frances and Danya suffered through my displaced frustrations and though they distracted me from my work, they made my living worthwhile.
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CHAPTER I

INTRODUCTION

The imposition of criminal status, as seen in the labeling of individuals as "delinquents," "suspects," or "felons," has been given much attention in criminological research and theory. While labeling theory has mainly dealt with the consequences of the imposition of criminal status, those dealing with criminality from the conflict and power perspective, and some labeling theorists as well, have sought to explain the determinants of the assignment of criminal status. In this area of inquiry, there have been two paths of study: One interest has been how and why particular forms of behavior come to be labeled as "deviant," while another line of investigation has sought to explain how and why particular persons come to be labeled as deviant. The present paper is concerned with the latter question: Why do certain people become labeled as deviant? Still more specifically, this paper is concerned with whether or not certain types of people are more likely to be labeled as "criminals" than others, and if so, why?

Proponents of the power and conflict perspective on criminality and criminalization have stressed that "criminality" is more properly viewed as the by-product of conflict between social categories.
possessing varying amounts of power than as the occurrence of an objectively definable type of "deviant" behavior. These writers have maintained that in the presence of normative conflict between the "powerful" and the "powerless," it is the less powerful who are most likely to be subject to criminalization. At the same time, those from the labeling school have described how stereotypes may influence social perception. Stereotypes of the "criminal" on one hand and of those such as Blacks, Indians, and the poor on the other, place certain categories of persons at a disadvantage in the organizational processing determining the imputation of deviant statuses.

On the basis of these general expectations regarding the importance of power and stereotyping in the process of criminalization, writers such as Turk, Chambliss and Seidman, and Quinney have argued that criminal status is more likely to be assigned to members of such categories as Blacks, Native Americans, the poor, and the young than to whites of middle and upper income and age. These particular patterns of discrimination in the assignment of criminal

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status are expected to exist because those of lower socio-economic status, minority group members, and youth are precisely those categories which possess relatively little power, which are likely to be in normative and economic conflict with the more dominant social group, and which are often seen in terms of negative stereotypes.

Despite the great concern over differentials in the assignment of criminal status, relatively few detailed explanations of the processes behind such differential assignment have been accompanied by quantitative assessments of the degree to which those explanations fit the empirical evidence. Most of those writing from the power and conflict perspective have cited studies of criminal sentencing as evidence that such differentials exist in the United States. However, these sentencing studies have not dealt with differentials in "labeling" or in the assignment of criminal status per se. These sentencing studies have dealt with differentials in the seriousness of the sentence imposed, as indicated by the type and length of sentence. For example, many of these studies have examined differences in the probability of receiving probationary sentences, short terms of incarceration, or long terms of imprisonment. While differential sentencing may constitute evidence of discrimination, it cannot be equated with the differential imposition of criminal status. Furthermore, as shall be explained in more detail later in this paper, reviews of past sentencing studies have not found
consistent evidence of substantial sentencing differentials based on socio-economic status, race, or age.\textsuperscript{4}

Whereas the theoretical statements about differentials in the assignment of criminal status have not often been accompanied by empirical estimates of the size of such differentials, many of the empirical sentencing studies have tended to be atheoretical. These studies have tested the null hypothesis that no differences exist in the types of sentences imposed upon persons who differ on the basis of "legally irrelevant factors" such as race, age, or the particular judge involved. Yet most of these studies have not gone on to elaborate the relevance of their findings to the theories which predict the null hypothesis to be false. Only recently have students of sentencing seen these studies as tests of some of the propositions implied by the power and conflict theory of criminalization.\textsuperscript{5}

Labeling theorists have presented descriptions of the processes underlying such differentials in sentencing from a Meadian symbolic interactionist perspective, stressing the ongoing interactive nature of the labeling process. However, since the design of most quantitative studies is limited


\textsuperscript{5}Hagan, pp. 357-60.
to cross-sectional data taken from only one or two points in time, some have maintained that attempts to quantify and measure this process are inappropriate because they obscure its interactive and dialectical nature.

It is granted that continuous observation may yield a deeper explanation of the labeling process than can cross-sectional studies. However, cross-sectional studies may be useful in describing discrepancies in particular labeling decisions, regardless of the interactive processes that may mediate the relationship between offender attributes and those decisions.

Due to measurement difficulties, empirical estimates of differentials in the imposition of criminal status have been relatively rare and inconclusive. Of course, very little social theory would exist if it were widely believed that the only relationships which could be hypothesized are those which have been rigorously operationally defined and quantitatively measured. Yet, the criticism can be made that the existence of these differentials has been assumed to a greater degree than it has been demonstrated.

The present paper will briefly outline the power and conflict perspective, especially as it relates to the assignment of criminal status. Then a model, derived from this perspective, will be

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developed in order to predict the effects of specific offender characteristics on the imposition of criminal status. Finally, these predictions will be compared with empirical instances of criminal labeling in order to test the efficacy of the model.

Although persons may be labeled criminal in a variety of ways, many of which are difficult to measure, one limited form of the assignment of criminal status is relatively easy to measure and is accompanied by enough record keeping to facilitate examination of differentials in such assignment. As was said earlier, most aspects of criminal sentencing involve the imposition of criminal status only indirectly. However, in many jurisdictions the judge has an option, a sentencing decision which does constitute a direct, formal, and significant decision regarding whether or not to impose the status of a "convicted felon." The laws of many states provide for a type of judicial sentence which may allow a person to escape formal adjudication and stigmatization as a de jure "convicted felon," even though that person has plead guilty or been de facto convicted of a felony. Chiricos, Jackson, and Waldo⁷ have made the case that the decision regarding whether or not to defer formal adjudication of guilt is of no small consequence to the offender, and that the records of these decisions provide an opportunity to examine

inequalities in the imposition of a criminal label. In a sample of probationers in Florida, Chiricos and Waldo found statistically significant differences in the percentage of persons adjudicated guilty between categories of persons possessing different legal and socio-biographical status characteristics.\(^8\)

The study of Chiricos, Jackson, and Waldo is replicated in the present research with data regarding the imposition of sentences in a western state over a period of approximately five years. The earlier study by Chiricos, et al., was limited to examining the bivariate relationships between the legal and personal—biographical characteristics of offenders and the formal adjudication of guilt. In the present research, techniques of multivariate analysis are used to estimate the magnitude of differentials between various types of offenders in the likelihood of avoiding formal adjudication of guilt after adjustments have been made to control for the effects of various other legal and socio-biographical attributes. In this way, the independent effects of offender attributes upon the likelihood of becoming a "convicted felon" are assessed while the effects of the other important factors are simultaneously controlled. Using these multivariate methods, the relative importance of sets of legal and socio-biographical attributes may also be assessed, as well as the degree to which the legal and

\(^8\)Chiricos, Jackson, and Waldo, pp. 556-64.
socio-biographical attributes collectively account for the variation in this particular instance of the assignment of criminal status.

The observed differentials in the adjudication of guilt are compared to the differentials or lack of differentials expected under the power and conflict model of the legal system. The apparent presence or absence of effects of legal and socio-biographical status characteristics upon the imposition of criminal status, as well as the relative magnitude of such effects, also provides evidence regarding some of the classical questions asked in sentencing studies (e.g. Green\textsuperscript{9}): When all characteristics of the offenders are held constant, how much variation exists between judges in the likelihood of deferring the formal adjudication of guilt? How much effect do legal factors have in comparison with legally irrelevant factors such as race or social class? Taking into account all known offender characteristics at once, how predictable is the decision to formally adjudicate guilt?

The answers to these questions will allow evaluation of the degree to which the judicial system has performed in accordance with the ideals of equal treatment and of rational and legal criteria for decision making. Of the previous studies to date, very few have utilized the multivariate methods necessary to enable one to answer such questions

with any substantial degree of certainty that spurious correlations were not distorting the evidence. Furthermore, none of the studies published thus far utilized such methods to estimate the effects of these factors upon the decision to defer formal adjudication of guilt.

The results of this research thus contribute to the evaluation of both the general model suggested by the power–conflict perspective and the legal ideals regarding the assignment of criminal status, indicating the degree to which the predictions derived from each fit the observed disposition of cases.
CHAPTER II

THEORETICAL BACKGROUND

The Significance of the Assignment of Criminal Status

Inequalities in the likelihood of the assignment of criminal status are worthy of attention for several reasons. First, because within the stated ideology of the American legal system, such inequalities constitute an injustice. Second, such inequalities are worth attention because they have been predicted to have effects upon the subsequent thinking and behavior of those subjected to those inequalities. Third, such inequalities are worth attention because they expand our knowledge of the relationship between the American stratification system and the judgements made within the criminal justice system.

The effects of social stigmatization upon the subsequent behavior of the labeled has been the primary concern of "labeling theory" from the early work of Mead\(^\text{10}\) and Tannenbaum\(^\text{11}\) through the more recent


discussions by Erikson, \textsuperscript{12} Becker, \textsuperscript{13} Lemert, \textsuperscript{14} Kitsuse, \textsuperscript{15} Schur, \textsuperscript{16} and others. This body of work has explored how the application of criminal labels may have the effect of producing, reifying, or confirming an individual's identification of himself as "deviant," thus making subsequent deviant behavior more likely.

Lemert\textsuperscript{17} has described how a pattern of "secondary deviance," in which a person's life and identity are organized around the facts of deviance, may be expected to develop as a response to the problems of stigmatization arising from an initial act of deviance. Thus, social reaction is expected to have the effect of reinforcing the very pattern of deviance it is intended to stop.\textsuperscript{18}


\textsuperscript{17}Lemert, \textit{Human Deviance}, pp. 42-43.

\textsuperscript{18}Edwin Hall and Albert A. Simkus, "Inequality in the Types of Sentences Received by Native Americans and Whites" (paper presented at the meeting of the American Society of Criminology, Chicago, Ill., November, 1974), pp. 20-21.
Lemert has also stressed that perceived inconsistencies in social reaction and in the assignment of criminal status can be expected to produce an even more powerful commitment to a deviant identity. Inconsistencies in the assignment of criminal status are perceived as an injustice and serve to delegitimize the criminal justice system in general. The presence of disparities in the treatment of members of certain groups tends to delegitimize the legal system most intensely in the eyes of those who suffer most under those disparities. As a result of this process of delegitimization, those who suffer under differentials in treatment can be expected to feel and show contempt for the system of criminal justice. Since the demeanor or "attitude" of an offender is often cited by judges as a factor in the determination of sentence, initial patterns of differential treatment may be expected to have the effect of producing antagonisms which feed back upon, reinforce, and intensify patterns of differential treatment in the courts.

A circular process may be imagined in which discrepancies in the sentence imposed upon certain categories of persons leads to the production of a "bad attitude" by those persons towards the court, which in turn leads to further such discrepancies in sentencing.

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19 Lemert, Human Deviance, pp. 42-43.
20 Hall and Simkus, pp. 9-21.
21 Hall and Simkus, p. 20.
22 Ibid.
If the possible effects of differentials in labeling upon the subsequent attitudes and behavior of offenders are accepted as important, one should naturally be interested in which kinds of offenders are treated differently, and why. In much of the literature dealing with this question, conflict and differences in the possession of power between age groups, ethnic groups, and classes have been seen as crucial in determining who suffers from an increased likelihood of being assigned criminal status.

Power and Conflict in the Ascription of Criminal Status

The labeling theorists have been primarily concerned with the degree to which the behavior and the identity of the criminal are consequences of having been assigned criminal status. However, Turk and other conflict theorists and some labeling theorists as well, have seen the ascription of criminal status as the problem to be explained.

In reaction to the fact that official dispositions and statistics are not actually measures of behavior, Turk and others have asserted that criminality is an assigned status rather than behavior. Turk's description of the process of criminalization involves an elaborate explanation of the importance of the power tactics of "norm enforcers" and "norm resisters," as well as their reactions to each other. Turk maintains that "one expects that in general, as the power difference favoring the

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enforcers increases, the probability of criminalization of the opposition increases. Based upon the findings of earlier studies of sentencing, Turk assumed that inconsistencies in the ascription of criminal status exist, and that these inconsistencies are due to differences in the power and the other personal attributes possessed by persons dealt with by the norm enforcers.

... criminal status may be ascribed to persons because of real or fancied attributes, because of what they are rather than what they do... Turk, p. 9.

The point is that nothing and no one is intrinsically criminal; criminality is a definition applied by those individuals with the power to do so, according to illegal and extra-legal, as well as legal criteria.

According to Turk, the importance of power lies in the ability to punish the enforcer for his "deviance." Turk discussed the importance of other personal attributes of the offender only in terms of the perceived threat posed by the offender to the authorities and to the public.

Becker also described the importance of power in the negotiation process which marks role assignment and labeling.

Who can in fact force others to accept their rules and what are the causes of their success? This is of course a question of political and economic power.

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24 Turk, p. 68.
26 Turk, p. 10.
27 Becker, pp. 15-18.
28 Becker, p. 17.
The expectation that minority group members, the poor, and the less powerful are more likely to be assigned criminal status is simply one aspect of the common belief that such persons are more likely to suffer under the legal system in general. Chambliss and Seidman's theory of the legal process in complex societies provides one of the more formal explanations of this general expectation.¹⁹

1. The enforcement of laws against persons who possess little or no political power will generally be rewarding to the enforcement agencies of the legal system, while the enforcement of laws against persons who possess political power will be conducive to strains for those agencies.

2. In complex societies, political power is closely tied to social position.

3. [Therefore] Where laws are so stated that people of all classes are equally likely to violate them, the lower the social position of an offender, the greater is the likelihood that sanctions will be imposed upon him.

4. [And likewise] When sanctions are imposed, the most severe sanctions will be imposed on persons in the lower social class.²⁰

If the imposition of criminal status is itself a form of sanction, and if it is associated with various other forms of sanction as well, expectations of differentials in the imposition of criminal status may be derived directly from the propositions in Chambliss and Seidman's theory. Chambliss and Seidman suggested that the effects of such factors as ethnic status and age are exerted through their effects on

²⁹Chambliss and Seidman, pp. 473-475.
³⁰Chambliss and Seidman, p. 475.
socio-economic status and the relationship between status and power. Although they did not rule out alternative processes, Chambliss and Selzman's primary argument, and some aspects of the arguments of Turk\textsuperscript{31} and Schur\textsuperscript{32} as well, can be represented by the crude path model in Figure 1.

Under such a model, the disadvantages suffered by Blacks, the poor, and others are viewed as a product of their inability to hire effective lawyers, lack of sophistication regarding how the legal system works, and their inability to cause strains for the legal organization and its officers through engaging in protracted legal battles or through applying political pressures. The problem is that the disadvantaged lack the resources for negotiation in our adversary system of "bargain justice." The power theory of the assignment of criminal status maintains that those higher in social position are less likely to be assigned criminal status because the resources of power associated with one form of status can be used to acquire other forms of status. Wealth, for example, may be used to acquire education, prestige, or influence.

The power-conflict theorists may easily be faulted for giving little or no indication of the expected magnitude of differentials in the

\textsuperscript{31} Turk, pp. 67-70.

\textsuperscript{32} Schur, \textit{Labeling Deviant Behavior}. 

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FIGURE 1

A Crude Path Model of the Causal Effects of Socio-Biographical Attributes
On the Assignment of Criminal Status, As Implied by Chambliss and Seidman's Theory of the Legal Process in Complex Societies

Resources providing the ability to:
(1) cause strains on the system,
(2) cause strains on the norm enforcers,
(3) hire an effective lawyer, and
(4) plea bargain

The Assignment Of Criminal Status

Wealth

Ethnic Status

Age

Education

Socio—Economic Status

Prestige

Power
assignment of criminal status. A differential may be too small to be considered very important in the determination of a discretionary decision, as indicated by $R^2$, $\beta^2$ or a measure of association with a proportional reduction of error interpretation. Yet that same small differential might involve a sufficient degree of discrimination to be considered an injustice by those discriminated against, the authorities, or the citizenry in general. 33

A shortcoming of Chambliss and Seidman's theory is that it is not very explicit regarding what factors might reduce or eliminate such differentials. Chambliss and Seidman acknowledged the existence of normative expectations that judges will be unaffected by power and influence. Yet they implied that such expectations will have no effect upon the behavior of the authorities, and will only produce a gap between expectations and actual performance.

Legal-rational legitimacy requires that laws be stated in general terms equally applicable to all.

Therefore, the rules defining the roles of law-enforcement officials will require them to apply the law in an equitable manner.

Therefore, to the extent that the rules to be applied are potentially applicable to persons of different social classes, the role-performance of law-enforcement officials may be expected to differ from the role-expectation embodied in the norms defining their positions. 34

33Hall and Simkus, p. 16.

34Chambliss and Seidman, p. 475.
A great problem in assessing the validity of the power-conflict model is that rigorous empirical tests of the importance of power in the assignment of criminal status are difficult to carry out. It is difficult to observe the influence of power directly. It is even difficult to examine the effects of power by examining the association between presumed indicators or correlates of power and the imposition of criminal status. Impressions of whether or not differential treatment exists can be obtained from the accounts of police, district attorneys, and other citizens subject to their decisions. However, the persons from whom such accounts are obtained may be biased or perhaps even less than entirely truthful in their testimonies.

Systematic data which would allow the examination of differentials in the assignment of criminal status and the factors associated with such differentials are rarely available. The decisions of the police regarding who to "look out for" and whom to let go are not accompanied by systematic records or observations. Nor are the negotiations between police, district attorneys, judges, offenders, and the lawyers of offenders open to view and recording.

One exception to this dearth of reliable information regarding discretionary decisions made within the criminal justice system is the case of sentencing. Compared to the other occasions of discretionary decision making, sentencing decisions are recorded and these records are often accompanied by extensive information regarding the legal and
socio-biographical characteristics of those sentenced. Although it is
difficult to directly observe the effects of power on the sentencing pro-
cess, it is possible to estimate the effects of such influence by examining
the associations between the assumed correlates of power and the out-
comes of the sentencing process. For this reason sentencing provides
a relatively good opportunity for evaluating the propositions embodied
in the power and conflict model of the imposition of criminal status.

Sentencing as the Imposition of Criminal Status

The sentences imposed upon convicted offenders have been examined
many times for evidence that discrimination does or does not exist in
the criminal justice system. This has been the case for several rea-
sons. First, the process of sentencing is accompanied by record
keeping and there are more opportunities for open observation of circum-
stances and outcomes than is the case with the other crucial points in
the exercise of discretion in the criminal justice system. Reliable and
objective data are simply more available in the case of sentencing.
Secondly, if forms of discrimination exist within the relatively open
processes of the court, similar discrimination might be even more
likely to occur in circumstances where it is less easily observed,
such as in the streets or in the offices of prosecuting attorneys.
Finally, sentencing has been given attention because in the contemporary
American legal system the judge possesses a degree of discretion which
is awesome.
Even after a person has been arrested, charged, prosecuted, and found guilty, a judge may in some instances have within his discretion the ability to either sentence that person to life imprisonment or to allow the offender to go free without having been formally convicted of a felony. The judge may also impose a sentence involving any number of conditions between these two extremes. The exercise of discretion in the judge's decision is of special importance because the sentence is to a large degree final in the determination of the status, treatment, and punishment of the offender.

Those writing from the power and conflict perspective have clearly felt that they expect the sentencing process to reflect the discrimination they believe to exist in the criminal justice system in general.

The demands for efficient and orderly performance of the court to dispose of cases in ways that insure the continued smooth functioning of the system. The consequence of such a policy is to systematically select certain categories of offenders (specifically the poor and the Black) for the most severe treatment.  

Obviously judicial decisions are not made uniformly. Decisions are made according to a host of extra-legal factors, including the age of the offender, his race, and social class. Perhaps the most obvious example of judicial discretion occurs in the handling of cases of persons from minority groups. Negroes, in comparison to whites, are convicted with lesser evidence and sentenced to more severe punishments.

35 Chambliss and Seidman, p. 468.
36 Quinney, p. 142.
Granting that sentencing provides an opportunity to examine evidence regarding one instance of the general expectations of discrimination in the criminal justice system, does differential sentencing constitute the differential imposition of criminal status? Qualitatively different types of sentences may be seen as instances of differences in the imposition of criminal status more easily than can moderate differences in the length of sentence. Although "probationers" and "ex-cons" are both "felons," those receiving probationary sentences may be associated with slightly different expectations and degrees of stigmatization than those receiving sentences of imprisonment. The probationer may be regarded as one who may relatively easily redeem himself. Particularly if his period of probation has successfully elapsed, his primary act of deviance may be seen as a temporary mistake rather than a sign of some deeper "criminal nature." The felon placed in prison has been identified as someone who either deserves or needs the last resort of punishment, while the probationer has been pronounced as possibly capable of "rehabilitating himself."

Although all of the above distinctions between different types and lengths of sentences can be construed as implying the assignment of slightly different types or degrees of criminal status, they do not directly address the fundamental problem: whether or not criminal status is assigned, and the correlates of this assignment.
Of all the sentencing alternatives available to the judge, the decision regarding whether or not to defer or decline formal adjudication of guilt is the sole instance of a sentencing decision which directly and explicitly involves labeling an individual as a criminal. In many states it is possible for a judge to grant such a "deferred sentence" or "withheld formal adjudication of guilt." Under this type of sentence the adjudication of the offender as a "convicted felon" is deferred, the offender is not generally incarcerated, and after completing a successful probationary period, he is released from supervision having never been formally assigned the "convicted" status. Whereas the probationer, the offender who is sentenced to a short term in prison, and the lifer are all formally assigned the status of "felon" with its attendant loss of rights and privileges, the offender who is never formally adjudicated guilty may more or less escape this status and its consequences.

Chiricos, Jackson, and Waldo have argued persuasively that "for felony cases, the distinction between imposing and withholding adjudication of guilt is neither trivial nor technical." If the offender moves where his previous "offense" is unknown, he faces none of the stigmatization associated with being a "convicted felon." The probationer who has been given a deferred sentence may "pass" as a non-felon; indeed, he is not a formally convicted felon. Furthermore, the individual who

37 Chiricos, Jackson, and Waldo, p. 554.
receives a deferred sentence also retains the rights regarding employ-
ment, ownership of property, political participation, freedom of
movement and action which he would otherwise have lost. In short, for
the offender given a deferred sentence, one offense need not create a
criminal identity. Thus the decision regarding formal adjudication of
guilt for a felony is as clear and formal an instance of the use of discre-
tion in the imposition of criminal status as we may find within the
American legal process. In addition, this decision is often accompanied
by sufficient record keeping to make possible an examination of the
degree to which differences in the imposition of criminal status are
systematically associated with differences in the legal and socio-
biographical attributes of those sentenced. Since the formal adjudication
of guilt is a special case of both sentencing and the assignment of
criminal status, the deferred sentence provides an ideal opportunity to
examine the factors associated with both the imposition of criminal
status as a dimension of sentencing and sentencing as a special instance
of the imposition of criminal status.

Up to this point, sentencing and the assignment of criminal status
have been discussed only from the power—conflict point of view. How-
ever, there are alternative models of the labeling process from which
predictions about the assignment of criminal status may be derived. In
order to define the power—conflict model more clearly, some discussion
of these alternative perspectives is essential. It is possible that the
ideals and objectives of various sentencing ideologies might have an
effect upon the behavior of judges who interpret their role in terms of
those ideologies. Therefore, consideration of the "proper" criteria
for sentencing under those ideologies provides an alternative set of
expected relationships to those expected under the power—conflict model.

The "Proper" Criteria for Sentencing Decisions

Three young men broke into a liquor store and stole a quantity
of liquor and cash. They were subsequently apprehended and
all three plead guilty to the same offense. Upon sentencing,
the judge imposed a deferred sentence upon the first offender,
a suspended sentence upon the second, and sentenced the third
offender to a term in the state penitentiary.

The situation above took place within the jurisdiction involved in
the present research and was recounted to the author by the judge
involved. This case vividly demonstrates that the severity of sentence
may be determined by factors other than the category of offense for
which the offender has been found guilty, although the precise identity
of these other factors may be unclear. To some observers, discrepan­
cies in the sentencing of offenders found guilty of the same type of
offense are seen as injustices, violating the principle of equal treatment
under the law. To others, including the judge involved in the afore­
mentioned case, such discrepancies are seen as a justifiable, indeed
desirable, consequence of the "individualization of sentencing," in which
the judge is granted a great deal of discretion so as to allow him to fit
the sentence to the individual circumstances and characteristics of the
offender.
The ideal of equal treatment under the law is of fundamental value within the ideology of the American system of justice. Indeed, the idea of equal treatment is bound up within the very concept of justice itself. However, the implementation of this ideal is problematic, since it is also felt that the treatment given an offender should vary with the seriousness of the offense and perhaps even with some characteristics of the offender. In practice, the general idea of "equal justice for all" means that offenders ought to be treated equally regardless of one set of offender attributes (such as race or income), while offenders should be treated differently depending upon their status in regard to another set of attributes of the offender and his offense (such as the number of prior felonies and the seriousness of the offense). Thus, the implementation of the ideal of equal treatment becomes problematic when there is a lack of consensus regarding the definition of the "legitimate" and "illegitimate" sets of criteria for differential treatment.

It is apparent to many people that the shoplifter and the murderer do not merit equal treatment, thus the seriousness of the act is almost always considered a criterion by which men legitimately be seen as unequal and "justly" deserving of unequal treatment. Likewise, it seems legitimate to many that the repeated offender should be treated more harshly than the first-time offender. Far less agreement exists regarding whether a person's age, education, or sex can legitimately be placed upon the scales of justice, or whether instead, these facts
are of the very sort to which the "lady of justice" should be blindfolded. In regard to a final group of offender characteristics, it is widely agreed that such factors as one's race, ethnic origin, or social position ought not be taken into account in the determination of a just sentence.

Some reasons for differential treatment, such as the seriousness of the offense, are relatively universally recognized as legitimate. However, the legitimacy of other bases of discrimination in sentencing can be seen to vary from time to time, from place to place, and from judge to judge. This variation in the legitimacy of various criteria can be seen to be associated with differences in the beliefs regarding the primary objectives of sentencing as part of the sentencing ideology dominant at a particular time, among a certain group, or in the beliefs of particular individuals.

In regard to changes in attitudes toward sentencing over time, there has been a shift, as Hogarth\textsuperscript{38} has put it, away from "looking backward" at the offense toward "looking forward" at the chances for the rehabilitation of the offender. Edward Green\textsuperscript{39} has interpreted this shift as involving changes in the dominance of four basic orientations or schools of criminal jurisprudence. The first orientation considered the sole function of sentencing as punishment serving as retribution or


\textsuperscript{39}Green, pp. 2-3.
expiation for a crime. The second orientation, that of the "classical
school," reacted to excesses of punishment and sought to have the
severity of punishment equal the crime (as in Bentham's "moral arith-
metric") so as to deter offenders and potential offenders by evenly
counterbalancing the pleasure or gain to be obtained from a crime with
the severity of punishment, while not engaging in punishment solely for
the sake of punishment. A third group, the "positive school," rejected
punishment outright in favor of individual "treatment" and the elimina-
tion of the "underlying causes" of crime.

Green saw the fourth orientation, the dominant viewpoint in the
U.S., as involving a combination of the views of the positive school and
the concerns of the classical school regarding deterrence. According
to Green, this "neo-classical" school acknowledges the values of reform
and rehabilitation, but at the same time "it places the protection of
society above them and continues to assert the deterrent value of punish-
ment to achieve that end."40 In the present United States, sentencing
does seem characterized by a combination of objectives, the particular
combination and weight given to each objective varying from judge to
judge. As the weight given to each objective varies, it may be expected
that the factors influencing sentencing decisions will vary as well.

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40 Green, p. 3.
In terms of the criteria which may legitimately be taken into account in sentencing decisions, the most prominent division amongst the various schools of sentencing is between the positivist school, with its rehabilitative concerns, and the other schools of thought. The positivists' concern with rehabilitation leads to the necessity of granting the judge a great deal of discretion in the determination of sentence. From the positivists' point of view discretion is necessary so as to allow the judge to take into account various non-legal personal-biographical attributes of the offender when these characteristics have a bearing upon the likelihood of rehabilitation. In contrast to the discretionary criteria implied by the objective of rehabilitation, the objectives of deterrence, incapacitation, and retribution do not necessarily imply that non-legal personal-biographical characteristics ought to influence sentencing outcomes. In fact, the objectives of deterrence may be expected to be accomplished more effectively when penalties are consistent. Thus the practices seen as furthering the goal of deterrence would presumably discourage the inconsistencies introduced by allowing personal-biographical factors to be taken into account. The objective of retribution is also inconsistent with the principle of differential treatment. The principle of "an eye for an eye" could not be a clearer injunction to "have the punishment fit the crime" and not the individual. In greatest contrast to the idea of individualization is the general principle of "equal justice for all," which directly contradicts the
practice of allowing personal—biographical characteristics to have an
effect upon sentencing decisions.

In some cases, a factor which would seem to decrease the likeli-
hood of the offender committing future offenses is at the same time a
factor which might be a basis for prejudice and discrimination. An
example of such a situation would occur if persons employed in well-
paying, high—prestige occupations were to receive less severe sentences
than unemployed or unskilled workers. Sentencing differentials observed
in such an instance could be attributed to discrimination against offenders
from the lower classes. However, such differentials could also be
attributed to the judicious exercise of discretion, based on the assump-
tion that those who are employed in higher—status occupations may be
more likely to rehabilitate themselves. An empirically established
pattern of differential sentencing may fit the expectations derived from
both a power—conflict theory, as applied to sentencing, and the ideals of
the positivistic rehabilitation—oriented objectives of sentencing. In the
absence of independent evidence of the motivation of the judges involved,
the attribution of such a sentencing discrepancy to either the proper
exercise of discretion or to the improper influence of power and pre-
judice would have to be made on other than empirical grounds.

Sentencing ideologies may be expected to affect the granting of
defered sentences in the same ways that they are expected to affect
sentencing in general. If the principle of equal treatment for all does
in fact guide sentencing decisions, socio-biographical characteristics should have no influence upon the decision to defer sentencing. If sentencing is guided primarily by the objectives of retribution, incapacitation, and deterrence, the probability that a sentence will be deferred should be negatively influenced by the seriousness of the offense and the number of prior offenses, but it should be relatively unaffected by the socio-biographical attributes of the offender.

Of the various sentencing objectives, only if the objective of rehabilitation is of primary concern will the socio-biographical characteristics of the offender have an effect on the likelihood of formal adjudication of guilt. Interviews with judges have often revealed that they believe offenders are more likely to be capable of rehabilitating themselves if they are younger, more highly educated, married, employed, female, skilled in an occupation, or if they have dependents. If such types of people are perceived as more likely to rehabilitate themselves and less likely to recidivate, rehabilitation-oriented judges should be more likely to withhold formal adjudication of guilt for such persons.

The relationships expected under the power-conflict model and the principles associated with the objective of rehabilitation differ in several respects. Age is predicted to be positively associated with the

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assignment of criminal status if sentencing is influenced by the principles and assumptions usually associated with an orientation toward rehabilitation. In the power–conflict model, age is predicted to be negatively associated with the assignment of criminal status. Factors such as marital status and the possession of dependents are expected to have an influence in conjunction with the objectives of rehabilitation. Under the power–conflict model, those socio-biographical characteristics which are sources of power and influence are predicted to have strong effects, while other socio-biographical characteristics are expected to have far less effect.

"Improper" Factors Influencing Sentencing

The power and conflict theorists are not the only persons to suggest that sentencing may be influenced by factors other than the principles imbedded in the dominant sentencing ideologies. Numerous discussions of sentencing published over the last forty years have pointed out various "improper" sources of sentencing disparities, such as racial discrimina-

\[42\] and differences between judges.\[43\]


\[43\] Green, Judicial Attitudes, pp. 67-71.
Perhaps a majority of the previous empirical studies of sentencing have involved an examination of the possibility of racial discrimination, and the belief that such discrimination does indeed exist is widespread. The possibility of direct racial discrimination should be distinguished from the class-based racial discrimination described by Chambliss and Seidman's power-conflict model of the legal system. Chambliss and Seidman suggest that Blacks suffer disadvantages in sentencing mostly because they are poor and powerless, rather than because they are Black. The disadvantages of Black offenders are portrayed as problems of class rather than as problems of race. The older concerns over "prejudice" in sentencing portrayed the problem as rooted in the social-psychology of the judge: his perceptions, attitudes, and tendency to judge in terms of stereotypes. Chambliss and Seidman's more recent power-conflict model locates the problem in the financial and political resources of the offender: his ability to bargain effectively with the officers of the legal system. It should be noted that in contrast to Chambliss and Seidman, some writers identified with the power and conflict perspective, such as Quinney,\textsuperscript{44} seem to acknowledge the importance of both "prejudice" and the lack of resources.

In empirical terms, the power-conflict model in Figure 1 involves the assumption that the effect of race on the severity of sentence is

\textsuperscript{44}Quinney, \textit{The Social Reality of Crime}, p. 142.
accomplished almost entirely through socio-economic status as an intervening variable. The explanation involving racial "prejudice" suggests that race may influence the severity of sentence even when socio-economic status is held constant.

It should be pointed out that differences between judges, as well as differences between offenders, may be a source of sentencing disparities. Many writers have maintained that there are great differences between judges in the severity of sentences usually imposed. Differences between judges are suspected not only in terms of the average severity of sentences, but also in terms of the degree to which various characteristics of the offender and his offense are taken into account.

**Summary**

Different expectations regarding the factors influencing the assignment of criminal status through the formal adjudication of guilt can be derived from a conflict-power model of the legal system, the principles behind various sentencing ideologies, and various discussions of the factors influencing sentencing. Most clearly opposed to each other are the expectations drawn from the power-conflict model and the principles embodied in the objectives of deterrence, retribution, and equal treatment. The power-conflict model predicts that differentials in "social position" are associated with differentials in the adjudication of guilt. Deterrence, retribution, and "equal justice" imply consistency in the
face of all socio-biographical characteristics. The individualization of sentences, directed toward the objective of rehabilitation is expected to produce patterns of differential sentencing which may be partially similar to those predicted by the power-conflict model, but opposed to the principles of the other sentencing objectives.

Theories of racial discrimination predict the same sorts of disadvantages for minority group members as does the power-conflict model. The two diverge in regard to their interpretations of how race influences sentencing and the assignment of criminal status.

We may now ask: How well do these various predictions fit the actual differentials in the assignment of criminal status through the formal adjudication of guilt? As shall be shown, the evidence from the previous research is inconclusive and provides only a partial answer to this question.
The previous research bearing upon the questions with which this paper is concerned falls into two parts. The first part involves those studies which deal directly with the subject of this paper—the factors associated with the decision to defer formal adjudication of guilt. Only two previously published studies have been specifically concerned with the deferrment of sentence—the initial study by Chiricos, Jackson, and Waldo and a study by Hall and Simkus which dealt strictly with sentencing differentials between Native Americans and whites. Since the present research partially replicates the study of Chiricos, Jackson, and Waldo, their study will be discussed in detail.

The second portion of previous research relevant to the question at hand involves the relatively large number of studies which have examined the factors influencing the types and lengths of sentences imposed. This latter body of research cannot be used to estimate

45 Chiricos, Jackson, and Waldo, "Inequality in Imposition of a Criminal Label."

46 Hall and Simkus, "Inequality in the Sentences Received by Native Americans and Whites."
differentials specifically in the granting of deferred sentences. However, if those factors producing differentials in the length and types of sentences are influential factors in sentencing in general, these general factors may influence the specific case of the decision to defer sentencing.

**Factors Influencing the Decision to Defer Sentencing**

Chiricos, Jackson, and Waldo\(^4\) examined a population of consecutive felony cases receiving probationary types of sentences in Florida over an eight-month period. Consistent with the expectations derived from the power-conflict model, Blacks were found more likely to have been adjudicated guilty than whites (\(\bar{C} = .18\)); those with higher levels of education were less likely to be adjudicated guilty than those with little education (\(\bar{C} = .23\)); the employed received deferred sentences more often than the unemployed (\(\bar{C} = .19\)); and those with private attorneys fared better than those with court-appointed lawyers (\(\bar{C} = .17\)). However, contrary to the predictions derived from the power-conflict model, offenders with higher levels of occupational status were not significantly more apt to escape stigmatization as formally convicted (\(\bar{C} = .05\)). Furthermore, younger offenders were less likely to be adjudicated guilty than were older offenders (\(\bar{C} = .30\)), whereas the power-conflict model predicts that the young have a greater probability of being norm

\(^4\)Chiricos, Jackson, and Waldo, "Inequality . . . ," pp. 556–64.
resisters than do older persons and a lesser probability of being able to successfully defend themselves against punishment.

The effects of age were consistent with the hypothesis that rehabilitation-oriented judges are less likely to impose permanent stigma upon the younger offender. The positive relationships between being employed or education on the one hand and receiving a deferred sentence on the other, are as consistent with a rehabilitative model of sentencing as they are with the power-conflict model. Yet, contrary to the rehabilitative model, being married and having dependents were negatively associated with granting of a deferred sentence ($\tilde{C} = .23; \tilde{C} = .16$).

The factors most strongly related to the deferral of sentence were the legal variables. The chances of receiving a deferred sentence were negatively affected by the number of prior felony convictions ($\tilde{C} = .37$), the number of prior misdemeanor convictions ($\tilde{C} = .26$), a plea of innocence ($\tilde{C} = .23$), and the offense being against persons rather than property ($\tilde{C} = .16$).

Some relationships between particular variables and the adjudication of guilt were found to vary, depending upon the value of a third variable. Through the use of contingency table analysis, several such interaction effects were discovered. For example, the association between race and the adjudication of guilt was weakest among those offenders who have two or more prior felony convictions. On the other hand, age differences in favor of younger offenders became greater.
among those with longer criminal records. It was also reported that the educational differences in favor of those with a high school degree were greater among those with no prior felonies than among those with one prior felony. Among those with two or more felony convictions, those with a high school degree were more likely to be adjudicated guilty than those with less education.

Unfortunately, it is difficult to directly assess the independent effects of each of the offender characteristics because many of these characteristics which were associated with one another. For example, the association between being married and the adjudication of guilt may be explained by the following relationships: Married offenders were more likely to be older; older offenders were more likely to have more prior convictions; and those with more prior convictions are much more likely to be adjudicated guilty. In fact, when Chiricos, et al., controlled the effects of age, the positive relationship between marital status and being adjudicated guilty virtually disappeared.

First-order controls failed to eliminate the relationship between the sentence and race, age, education, type of plea, prior felonies, and the type of attorney. Such controls did eliminate significant differences on the basis of the number of dependents.

Unfortunately, since many of the background variables can be expected to be associated with one another, and since Chiricos, Jackson, and Waldo did not utilize higher-order controls which would have allowed...
them to control for two or more factors simultaneously, it is very
difficult to estimate the magnitude of the independent effects of each
variable. Also contributing to the difficulty of estimating the indepen­
dent effects is the fact that the effects of some possible first-order
controls were not examined (such as the effects of controls for the num­
ber of prior offenses upon the relationships between the sentence and
marital status or the number of dependents). Still another problem lies
in the statistical techniques used. The absence of partial measures of
association makes it difficult to assess how much the total association
between any one factor and the adjudication of guilt is reduced by the
imposition of controls for the other factors.

Despite these problems in estimating the size of the direct effects
of each individual factor, the observed associations can be compared to
the relationships expected under the previous theories and ideologies
regarding sentencing and the imposition of criminal status. Summariz­
ing these findings, the legal factors appeared to be the major determinants
of the decision to withhold formal adjudication of guilt. Nevertheless,
significant differentials associated with socio-biographical characteristics
were found. The directions of the associations between these socio­
biographical attributes and the type of sentence were largely consistent
with the predictions derived from both the rehabilitative model and the
power-conflict model. The ideal of equal and consistent treatment in
respect to non-legal factors was clearly contradicted by the evidence.
In an earlier paper, the author reported differences between native Americans and whites in the likelihood of receiving a deferred sentence among persons sentenced to probation in the state of Montana. Whites were found to have received deferred sentences more often than native Americans. Using multiple regression techniques with dummy variables, a difference of .08 was found between whites and native Americans in the probability of receiving a deferred sentence, after simultaneously controlling for the effects of the type of offense, the number of prior felonies, prior institutionalization as a juvenile, education, employment, occupation, marital status, age, sex, number of dependents, the type of prior offense, military service and type of discharge, and the average proportion of deferred sentences given by the judge passing sentence.

The finding that native Americans were more likely to be adjudicated guilty than whites was consistent with both the power-conflict model and the Black-white differences found by Chiricos and Waldo. However, the power-conflict model assumes that the effects of race upon sentencing are due to the negative relationship between minority group members and socio-economic status and the positive relationship between socio-economic status and power. Since the native American-white differential remained after the effects of education, occupation,

48Hall and Simkus.
and employment were controlled, it appears that being a native American may have direct effects upon the types of sentence imposed. If this is the case, the disadvantages suffered by native Americans may be at least partly due to the effects of prejudice, social perception, or other factors, rather than being solely due to a lack of resources.

This earlier paper was devoted entirely to native American-white differentials in sentencing. While a large number of other factors were utilized as controls as part of estimating the direct effects of ethnicity, the effects of these other factors themselves were not discussed. That is the subject of the present paper.

Factors Influencing Other Aspects of Sentencing

In contrast to the small number of studies dealing with the deferral of sentencing a large number of studies have looked for differentials in the proportion of offenders imprisoned, the lengths of prison sentences, and the proportion of offenders sentenced to death. While a number of studies have reported the effect of legal variables upon the sentence received, the majority of studies have been primarily concerned with the effects of personal-biographical attributes. Yet, after some thirty-five years of sentencing studies, there is no consensus regarding whether sentencing in the United States is characterized by discrimination on the basis of such personal-biographical characteristics as socio-economic status, race, and age.
Writers who have stressed the importance of power and group conflict in explaining criminalization and the imposition of sanctions have clearly concluded that sentencing in the modern United States is marked by general and substantial discrimination on the basis of socio-economic status and race. Nevertheless, in a recent review of sentencing studies, Hagan demonstrated that the empirical evidence thus far does not clearly confirm the existence of discrimination in sentencing. Hagan showed that in no case has the degree of discrimination on the basis of race, socio-economic status, or age been sufficient to show a substantial degree of association (as indicated by a measure of association with show a proportional reduction of error interpretation). Amongst the various studies reviewed by Hagan, the largest degrees of association found between race, S.E.S., or age and the severity of sentence, yielded values of $t_c \leq .08$. In addition, Hagan found that controls for the possibility of spurious sources of association were rarely imposed. When controls were imposed, the degree of association between these personal-biographical characteristics and the severity of sentence was reduced even further. Hagan found almost no cases where higher-order controls for two or more variables were utilized.

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49 Chambliss and Seidman, p. 468; Quinney, p. 142; Turk, p. 10.

50 Hagan, "Extra-Legal Attributes."
Of all the socio-biographical attributes expected to influence the type of sentence received, none has been examined more often than race. Even so, the evidence regarding racial differences is not much more conclusive than the evidence regarding other socio-biographical offender characteristics. In a review of the previous research on racial sentencing disparities, Hindelang found the evidence regarding racial discrimination to be inconsistent and inconclusive, some studies finding disparities, while other studies found none.

Thus far, Vines and Jacob, Johnson, Garfinkel, and Bullock have concluded that there is evidence of racial discrimination in our courts, while Green in two studies and Bensing and Schroeder have concluded that there is no evidence of racial discrimination in our courts.  

He suggested that the inconsistencies among the various studies might be explained by differences between the cases examined in each study. For example, sentencing differentials might be more likely during certain time periods or within particular regions and communities. Indeed, most of those studies finding significant racial differences involved cases sentenced prior to 1954 in the South. Most of those studies finding no racial difference involving cases sentenced after 1954 in the North.

Hindelang and others have hypothesized that another source of the differences between findings of the various studies has been the

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51 Hindelang, p. 321.
different types of offenses studied. Hagan and Hindelang both saw more
evidence of racial differences in those studies involving murder, rape,
and offenses against persons in general, than in those studies dealing
with offenses against property.

It has also been suggested that discrimination against Blacks in
sentencing is strongest when Blacks commit offenses against whites
Offenses of Blacks against Blacks, whites against Blacks, and whites
against whites are expected to be punished less severely. The evidence
that this has indeed been the case is contradictory.\textsuperscript{52}

Differences in the use of controls for spurious associations con­
stitute another possible reason for the inconsistencies between the
various studies. As Hindelang pointed out, controls for such factors as
the number of prior felonies tend to reduce the size of Black-white
differentials.\textsuperscript{53} Those studies finding significant racial differences
usually did not impose such controls. Those studies which did utilize
controls were less likely to find significant differences.

\textsuperscript{52} Guy Johnson, "The Negro and Crime," \textit{The Sociology of Crime
and Delinquency}, ed. Marvin Wolfgang, Leonard Savitz, and Norman
Johnston (New York: John Wiley and Sons, 1962), pp. 145-63; see also
Edward Green, "Inter- and Intra-Racial Crime Relative to Sentencing,"
\textit{Race, Crime, and Justice}, ed. Charles E. Reasons and Jack L. Kuy
Kendall (Pacific Palisades, Calif.: Goodyear Publishing Company,

\textsuperscript{53} Hindelang, p. 321.
Differences in the dependent variables employed in the sentencing studies may also account for differences in their results. Although all of these studies have examined the "severity of the sentence" as a dependent variable, the sentencing alternatives involved have differed.

Differential sentencing has been operationally defined in the following ways:

1. the length of incarceration, both as a ratio scale and collapsed into categories of "short" and "long";
2. the type of sentence imposed, such as probation versus imprisonment;
3. whether or not the death penalty was imposed; and
4. combinations of two or more of the preceding, treated either as an ordinal scale or as a ratio scale with intuitively assigned values.

It is possible that particular legal and personal-biographical background characteristics of offenders have different effects upon different kinds of sentencing alternatives. One factor might produce differentials in the imposition of the death penalty, yet the same factor might have little or no effect upon the sentence when the sentencing alternatives only involve short differences in the length of sentence to be imposed. The effect of who you are may depend upon what someone is considering doing to you. The most substantial evidence of racial differences in sentencing is found in those studies examining the
At the same time, the evidence regarding racial differences in the types of sentences imposed (e.g., deferred versus non-deferred, and probation versus imprisonment) is less conclusive. There is least evidence of racial differences when the dependent variable is defined as the length of sentence.

While the evidence regarding the influence of race is inconclusive, the situation regarding the effects of other socio-biographical characteristics is even less clear. The great majority of studies have lacked adequate controls for even the most obvious possible sources of spurious associations and for this reason it is highly speculative to try to use these studies to estimate the magnitude or even the existence of such effect. However, several studies do indicate the relative unimportance of socio-biographical characteristics as a set. For example, Hogarth's\textsuperscript{55} impressive study of sentencing in Canada did involve the use of methods of multivariate analysis. Hogarth demonstrated that a whole set of socio-biographical attributes explained only a minimal amount of the variance


\textsuperscript{55} Hogarth, Sentencing.
in the type and length of sentence. In his examinations of sentencing in Washington, Hewitt \textsuperscript{56} likewise found little sentencing variance explained by a set of socio-biographical characteristics.

The strong effects of legal attributes of the offender such as the number of previous felony convictions and the type of offense upon the type and length of sentence have been clearly established.\textsuperscript{57} The precise magnitude of the effects of each of these legal characteristics is often unclear due to the lack of controls. But the differences in sentences received by offenders who differ in the number of prior felony convictions are so great and so consistent that there is little doubt that this legal characteristic is of great importance.\textsuperscript{58} The importance of the seriousness and type of offense has also been clearly demonstrated.\textsuperscript{59} As a set, legal variables account for much more of the variance in sentencing than do sets of socio-biographical characteristics.\textsuperscript{60}

\textsuperscript{56}John D. Hewitt, "Individual Resources, Societal Reaction and Sentencing Disparity" (paper presented at the meeting of the Pacific Sociological Association, Victoria, B.C., Canada, April, 1975).

\textsuperscript{57}Green, Judicial Attitudes, pp. 29-50.

\textsuperscript{58}Green, Judicial Attitudes, pp. 42-46; see also Hogarth, pp. 346-7; Chiricos, Jackson, and Waldo, p. 561.

\textsuperscript{59}Green, Judicial Attitudes, pp. 32-41; see also Hogarth, pp. 346-7.

\textsuperscript{60}Hogarth, pp. 346-7.
There is reason to believe that the characteristics of individual judges are also an important source of variation in sentencing. Hogarth’s work has shown that the characteristics of judges do have an effect upon the sentence imposed. In Hogarth’s view the interaction between the characteristics of the judge and the judge’s perception of the attributes of the offender is particularly important. Green attributed much of the variation between judges to differences in the types of cases they handled. He correctly pointed out the need for controls on the types of offenders in the examination of differentials between judges. In his study Green concluded that the differences between judges in the likelihood of imposing various types of sentences were not statistically significant. However, an examination of Green’s tabulation of the differences between judges does seem to show sizable variation. The lack of statistically significant differences may be attributed to two factors:

1. the small number of judges involved, and
2. Green’s grouping of the judges in such a way as to minimize the overall variation between them.

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61 Hogarth, pp. 341-56.

62 Green, Judicial Attitudes, pp. 67-71.

63 After controlling for various attributes of the offender, Green ranked the judges in terms of the proportion of prison sentences imposed by each judge. The judges were divided into two and three categories on the basis of the proportion of prison sentences imposed. Then,
Dawson's study, though based upon field observation rather than statistical data, also tends to confirm the existence of disparities between judges.

Summarizing this body of research dealing with sentencing in general, several conclusions seem evident. The lack of controls and multivariate techniques makes it difficult to estimate accurately the strength of the independent effects of socio-biographical and legal attributes of the offender upon the severity of sentence. Since the zero-order relationships between legal characteristics and the severity of sentences are so strong, it appears that the legal characteristics have at least moderately strong direct effects. Because the differentials associated with socio-biographical characteristics are evidently smaller, the lack of adequate controls makes it impossible to be certain whether such factors have any effect at all. Taken as sets the legal characteristics appear to have had much more influence than have the socio-biographical characteristics.

Rather than testing the significance of differences among the whole range of judges, he tested the significance of differences within the groups of similarly ranked judges, thus minimizing the total variation. It may also be argued that the Kruskal-Wallis test of significance is an inappropriate statistic for measuring such between judge variation in sentencing. Examination of Green's tables does indicate substantial discrepancies between judges. Even within groups of similar cases, there is a range of at least thirty percent in the percentage of sentences of non-imprisonment handed out by each judge.

The weak evidence of differentials associated with socio-biographical characteristics and the relatively strong evidence of differentials associated with the prior record and the seriousness of the offense seem to cast doubt on the validity of both the power-conflict model and the rehabilitation model. Such findings suggest that, consistent with the objectives of deterrence, retribution, and isolation, sentences may be "equal" regardless of non-legal background characteristics. However, it must be stressed that the various power-conflict theorists do not state that the effects of race, class, and age will be greater than the effects of the offenders' criminal records and offenses. They simply state that race, class, and age differentials in a certain direction exist, and not the magnitude of these differentials. Therefore, the ambiguity of the empirical evidence regarding whether or not these evidently small differences exist prevents the possibility of either accepting or rejecting the power-conflict model. It is likewise difficult to draw conclusions regarding the degree to which socio-biographical characteristics have been taken into account with the intention of facilitating the objective of rehabilitation.

All of the above problems severely limit the possibility of making inferences about the decision to defer sentencing on the basis of the studies of other aspects of sentencing. However, the examination of this body of studies is very useful from the standpoint of pointing out the pitfalls of doing such research. In particular these studies illustrated
the crucial necessity of using multivariate techniques to impose statistical controls upon certain attributes of the offender and his offense while estimating the size of the effects of other attributes.
The present research involves secondary analysis of data regarding sentencing in the state of Montana, and is intended to serve two objectives. First, the study done by Chiricos, Jackson, and Waldo is partially replicated. This replication provides a comparison between these two independent sets of cases from separate regions of the United States, indicating the degree to which the simple bivariate relationships found in each set of cases may exist in other sets as well. The second objective is to go beyond the contingency table analysis utilized by Chiricos, et al., using multivariate techniques to further elaborate the relationships between the variables in the data from Montana. Only through the use of these multivariate techniques can the independent effects of the variables be estimated. This chapter is devoted to describing the data and methods used in both the replication and the multivariate analysis. Also specified is the combined model whose parameters are to be estimated in the multivariate analysis. It is the estimated parameters of this model which enable an evaluation of the degree to which the data fit the previously described theoretical models of the assignment of criminal status through sentencing.
The Data Sets

The data analyzed were originally gathered as part of a study of probation and parole, sponsored by the Board of Pardons of the state of Montana in conjunction with the State Board of Crime Control. The data were drawn from the official records kept by the Board of Pardons regarding all persons successfully prosecuted in the state district courts on felony charges, and subsequently subject to probation or consideration for parole. Due to peculiarities in the way cases were selected for the original project, the present data analysis deals with two separate, yet overlapping, sets of data.

The first data set approximates the population of cases involving probationary sentences imposed between July 1, 1966, and the end of December, 1971 (N = 1553). These "probationary sentences" include: (1) deferred sentences, which do not involve formal adjudication of guilt; (2) suspended sentences, involving adjudication of guilt, but not involving a period of incarceration in the state penitentiary;

65 This data set falls short of including the entire population in the following respects: The cases of approximately 65 offenders whose self-identified ethnicity was neither white nor native American (Blacks, Mexican-Americans, and Asian-Americans) are excluded from analysis. In the original study, a small number of files (approximately 5 percent) could not be located. In the multivariate analyses, cases which involved missing data regarding one or more of the more important variables are eliminated through list-wise deletion. In the analysis devoted to replication, the total number of cases is larger than 1553 and varies because pair-wise deletion of missing data is used.
and (3) partially suspended sentences, involving both adjudication of
guilt and a period of imprisonment in the state penitentiary of less than
one year. This data set allows examination of differentials in the pro-
portion of offenders receiving deferred sentences within the population
of offenders who received the less serious types of sentences involving
probation. It does not allow examination of differentials among the
total population of all those sentenced during this time period. The
persons included in this first set of data will be referred to as the
"probationers."

The second set was formed by combining a portion of the data
regarding probationers with a portion of another set of data describing
offenders eligible for parole. Included in this set are the cases of
persons receiving the three aforementioned probationary types of sen-
tences, as well as cases receiving the fourth possible type of sentence,
a prison term of greater than one year. This second data set approxi-
mates the population of cases successfully prosecuted for felony charges
in the state district courts between July 1, 1966, and December 31, 1967
(N = 515). An advantage of this second data set is that it allows

66 Those kinds of cases which are missing from the first data set
are likewise missing from the second set. In addition, a significant
portion of those offenders who were given sentences of twenty or more
years of imprisonment are also missing. The latter problem probably
has the effect of lowering the proportion of offenders present in the data
who were convicted of more serious offenses against persons.
examination of differentials in the proportion of offenders receiving deferred sentences among all those offenders receiving the whole range of possible sentences. Unfortunately, this data set contains a smaller number of cases than the first. This second set of data will be referred to as the cases of "offenders."

The Variables

The available data sets include information regarding a number of variables, each of which has been predicted to be of some importance in the determination of sentence by one or more of the aforementioned theories and studies. Additional detail was available regarding the types, lengths, and conditions of the sentences. However, this analysis deals only with the distinction between deferred sentences and sentences involving formal adjudication of guilt for it is this decision which most clearly constitutes the assignment of criminal status. The variables included in the data sets are as follows.

The Dependent Variable

The type of sentence: The dependent variable in all analyses is the type of sentence. This variable is a simple dichotomy, one category representing deferred sentences and another category including all other types of sentences which involve the formal adjudication of guilt. A "dummy" code of "0" is assigned to those cases given deferred sentences and a value of "1" is assigned to those cases not given a deferred sentence. In the first data set involving probationers, the cases assigned values of "1" include cases receiving suspended and partially suspended sentences. In the second data set, cases involving sentences of imprisonment of longer than one year are also included in the category of cases assigned a value of "1."
The Independent Variables

Socio-Biographical Characteristics

Age: The age at time of sentence\textsuperscript{67}

Sex: As indicated in the presentence investigation

Education: The highest grade completed at time of sentence

Occupation: The last occupation held prior to sentencing, categorized according to the occupational categories of the Hollingshead two-factor index\textsuperscript{68}

Employment: The offender's employment status prior to conviction\textsuperscript{69}

Ethnicity: The self-identified primary ethnic background of the offender\textsuperscript{70}

\textsuperscript{67} In a number of cases, particularly in the second data set, the ages of the offenders were determined upon incarceration, rather than immediately prior to sentencing. It is assumed that these characteristics did not change substantially during the short interval between sentencing and incarceration.

\textsuperscript{68} August Hollingshead, "Two Factor Index of Social Position," mimeo, 1965. In the multivariate analysis, the Hollingshead occupational categories are collapsed into the following five groups: (1) professionals, managers, proprietors and officials; (2) clerical and sales occupations; (3) skilled workers; (4) unskilled workers and laborers; and (5) unknown. In the replication these categories are further collapsed into the three categories: (1) professionals, (2) skilled workers, and (3) unskilled workers. This occupational information was unavailable in the second data set.

\textsuperscript{69} This variable is a trichotomy, distinguishing among those who were employed, unemployed, and non-employed (retired and housewives).

\textsuperscript{70} The only primary ethnic groups involved were whites and native Americans. The very small number of Blacks, Mexican-Americans, Asian-Americans and "others" are excluded from both data sets. There are too few cases from these ethnic groups to allow inferences regarding the effects of belonging to these ethnic categories. At the same time, it is undesirable to collapse those cases together with the cases of either whites or native Americans.
Marital Status: The offender's marital status at time of sentence

Dependents: The number of dependents at time of sentence (spouse excluded)

Legal Characteristics

Offense: In the multivariate analysis, the offense for which the offender was convicted is represented by the actual category of offense for those offenders which were most prevalent. These commonly occurring offenses are check passing, forgery, burglary I, burglary II, auto theft, grand larceny, second degree assault, and drug offenses. The remaining offenses are grouped into five residual categories: less serious property offenses, more serious property offenses, less serious personal offenses, more serious personal offenses, and "other" offenses. In the analysis devoted to replication these offenses were collapsed into the categories of property offenses, personal offenses, and other offenses.

Prior Felony Convictions: The number of prior felony convictions

Prior Probations: The number of prior sentences of probation (deferred and suspended sentences)

Prior Paroles: The number of prior paroles

Juvenile Offenses: The number of prior offenses as a juvenile

Juvenile Institutionalization: The number of earlier commitments to correctional juvenile institutions

Plea: Whether the offender pleaded innocent or guilty

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The insignificant number of pleas of nolo contendere were grouped with those cases involving pleas of guilty.

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The Judge

The Severity of the Judge: The adjusted proportion of cases adjudicated guilty by each judge\textsuperscript{73}

The variables examined, and the breaking points which form the categories of these variables, differ between the analysis directed toward replication and the multivariate analysis. For purposes of comparison, the breaking points used by Chiricos, et al., were rigorously followed in the analysis devoted to replication. Both for theoretical reasons, and also because of the distribution of cases across categories, slightly different breaking points are used in the

\textsuperscript{73} Four categories of judges were developed in the following manner. Dummy variables were formed to represent those cases handled by each judge having sentenced thirty-five or more cases (most of the judges included dealt with more than one hundred cases). The type of sentence was then regressed on the variables representing these judges, plus the variables representing the socio-biographical and legal characteristics of the offenders. The size of the unstandardized regression coefficients represented the effect of each judge upon the probability of an offender being adjudicated guilty—after the other factors had been controlled. The judges were then grouped into four categories on the basis of the size of those coefficients. These categories of judges are assigned the crude labels of "most severe," "severe," "average," and "least severe." A small number of cases were sentenced by judges who handled very few (\textless 35) cases. These cases are included in the category of those offenders sentenced by judges of "average" severity. Thus derived, this set of four categories results in the full amount of between-judge variance in sentencing being somewhat underestimated. However, this categorization does allow an approximate estimate while allowing the use of a much smaller and more reasonable number of dummy variables.
multivariate analysis. The categories used in each step of analysis are specified in the tables summarizing the results of the analysis.

For the purpose of replication, the percentage of probationers adjudicated guilty is calculated within categories of all of the above variables which are similar or identical to those examined by Chiricos, et al. Three of these variables are omitted from the multivariate analysis. The number of prior probations and the number of prior paroles are of course highly correlated with the number of prior felony convictions. Since the number of prior probations and the number of prior paroles do not add much information to that contained in the variable "prior felonies," these two variables are omitted from the multivariate analysis in order to avoid the problems of multicollinearity.

There is likewise a good deal of overlap between the number of juvenile offenses and the number of juvenile incarcerations. The variable representing the number of juvenile offenses was excluded from the multivariate analysis for a couple of reasons in addition to the problem of multicollinearity. First, the ratio of the number of juvenile offenders to the number of offenders institutionalized as juveniles was relatively small (less than 2 to 1), suggesting that many prior juvenile offenses may have been unrecorded by the probation and parole authorities. Second, contingency table analysis revealed that the association between juvenile offenses and the formal adjudication of guilt disappeared when the number of juvenile incarcerations was held constant.
The replicated analysis also differs slightly from the multivariate analysis in the data examined. The sample examined by Chiricos, et al., included probationers only. Therefore, the replication likewise deals strictly with the probationers (the first data set).

Advantages and Disadvantages of the Data Sets

In terms of their suitability for examining the relationships with which this study is concerned, the data have both advantages and disadvantages. The disadvantages of the data are consequences of the fact that the data were originally gathered by persons other than the author and for purposes other than those of the present study. As is a common problem in secondary analysis, some desirable information was not included.

It would be valuable to have information regarding the recommendations of the probation officer and the prosecuting attorney. Unfortunately, this information was not included. Interviews with some of the judges involved in these cases indicated that these recommendations are given a sizeable degree of weight in the judge's determination of sentence. Although the judges may be responsible for the final determination of sentence, discrepancies in the types of sentences imposed may be due to various factors influencing the judge through their influence on probation officers and prosecuting attorneys. Hence, sentencing discrepancies should be interpreted as properties of the
sentencing process as a whole, rather than as direct evidence of the perceptions, prejudices, or interests of the judges.

It would also be desirable to have more indicators of the offenders' resources and socio-economic status. The income of the offender and the type of attorney (court appointed or private) would be valuable additional indicators of the clients' resources. Particularly since a large percentage (34 percent) of the offenders were less than twenty-one years old, information regarding the resources of the offenders' parents and family could also be helpful in determining the total resources available to the offender.

Information regarding the ethnic and socio-economic status of the victims would have allowed a test of the hypothesis that discrimination against minority group members is more severe when an offense has been committed against a member of the ethnic majority. However, it should be noted that the ethnic minority in the present data comprises only 4 percent of the state population. Furthermore, offenses committed on six of seven reservations in the state are not subject to the jurisdiction of the state district courts. Therefore, particularly in offenses against property, the offenses committed by native Americans seem most likely to have been committed against whites.

The original charges against the offender constitute a final desir­
able but omitted piece of information. Data regarding whether or not
the charges against the offender were reduced between the stages of
arrest and sentencing might have helped reveal the significance of plea
bargaining in the assignment of criminal status through sentencing.

All of the above shortcomings involve desirable information which
is not present in the data sets. It should be noted that even though the
data do not contain all the information we might desire, they do contain
far more of the important variables than have been examined in the
great majority of sentencing studies. In addition, the present data have
several other advantages. First, the data cover a longer period of
time (five and one-half years in the first data set) and a larger geo­
 graphical area (a state) than the data examined in most previous studies
of sentencing. Second, with the exception of the limitations noted
earlier, the cases approximate a population rather than a sample of
a population. Third, studying cases from Montana provides a regional
contrast to Chiricos, Jackson, and Waldo's study of Florida. Fourth,
the data are unique in that native Americans rather than Blacks are the
predominant minority group involved in the dispositions.

75 Supra, footnote 65.
The first research objective is to compare the first data set to the similar data from Florida examined by Chiricos, Jackson, and Waldo. For this partial replication, the analysis simply involves examining the percentage of offenders formally adjudicated guilty within each category of the various offender-offense background characteristics.

In the multivariate analysis, general multiple regression techniques are used in order to estimate the effect of each of the legal and personal-biographical attributes of the offenders upon the probability of being adjudicated guilty, while the effects of the other attributes are held constant. Since the dependent variable is a dichotomy assigned codes of "0" and "1," the predicted value of the dependent variable, as indicated by the regression equation, may be interpreted as the conditional probability that a case belongs to the category of the dependent variable coded as "1." The use of regression procedures with a dichotomous dependent variable is known to produce biased estimates.


of the additive model. In the most obvious instances of such bias, the predicted additive probabilities may yield predicted probabilities of less than zero or greater than one.\textsuperscript{78} Despite these well documented problems, the difficulties inherent in alternative procedures are sometimes sufficiently great to outweigh the problem of bias in the regression approach. In the present case, the regression approach is preferred because of the large number of independent variables and the large number of categories within these variables. Calculation of equivalent log-linear models would necessitate the use of an enormous amount of computer space. Furthermore, such calculations would require the addition of an arbitrary constant to each cell frequency due to the very great number of zero cells produced by the high order contingency tables.

Even though several of the independent variables were measured on a metric scale, all of the independent variables are also entered into the analysis as categorical variables represented by sets of \( K - 1 \) "dummy variables" (where \( K \) = the number of categories of each theoretical variable). This procedure was chosen because these variables were not assumed to have perfectly linear relationships with the dependent variables.

\textsuperscript{78}Netter and Maynes, pp. 503–4; Goldberger, p. 253.

variable. This approach also allowed the transformation of the regression statistics into terms of multiple classification analysis.

In the use of the general regression model, several values are useful in evaluating the relative effects of each of the legal and socio-biographical characteristics of the offenders upon the probability of being adjudicated guilty. The standardized regression coefficients interpreted as path coefficients, indicate the degree of effect one standard deviation of change in each independent variable has upon the variation in the dependent variable (also in standardized form). In those cases where theoretical variables are represented by more than one dummy variable, the standardized regression coefficients representing the effect of each individual dummy variable upon the dependent variable are not very informative. A measure of the summary effect of the entire set of dummy variables representing each theoretical variable, is a more valuable statistic. For instance, the effect of "age" as a whole is theoretically more meaningful than the effects (in standardized form) of being in each particular age category. For this reason, the standardized effects of each variable are summarized through the use of a "sheaf coefficient," as described by Heise.80 This sheaf coefficient is a "multiple partial standardized regression coefficient,"

indicating the relative effects of such variables as age, occupation, or marital status, while controlling the effects of the other independent variables in the regression equation.

The sheaf coefficients and standard path coefficients (standardized partial regression coefficients) indicate the relative importance of each of the legal and personal-biographical variables vis-a-vis each other. In order to indicate the additive effects of being in particular categories of the independent variables upon the dependent variable in terms of the actual scale of the dependent variable (interpreted in this case as the conditional probability of having been adjudicated guilty), multiple classification analysis (MCA) is used. The MCA coefficients express the effects of having been in particular categories of the independent variables in terms of the predicted deviation of the dependent variable from its grand mean. These MCA coefficients are analogous to unstandardized regression coefficients and may be derived from them; however, the unstandardized regression coefficients express the effects of the independent variables in terms of deviations from the intercept of the regression line, rather than in terms of deviations from the grand mean of the dependent variable. The "unadjusted deviations" indicate the deviation of the means of the dependent variable within each category.

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of the independent variables, from the grand mean of the dependent variable for all cases. The "adjusted deviations," as in the case of partial regression coefficients, are "partial" effects indicating the effects of each of the variables when the values of all other independent variables are held constant.

The multiple correlation coefficient ($R^2$) is used to evaluate the degree to which sets of the independent variables account for the variation in the formal adjudication of guilt. Multiple partial correlation coefficients are used to indicate the additional variance accounted for by each set of variables after the variation accounted for by other sets of independent variables has been removed.

In addition to estimating the additive regression model, attempts are made to assess the possibility of important interaction effects. Those interaction effects found by Chiricos, Jackson, and Waldo in their data from Florida are examined. Furthermore, since it has been suggested that differentials between ethnic groups vary depending upon the type of offense, differences between native Americans and whites are examined within specific offense categories. A final means of estimating the importance of statistical interactions involves a broader approach. A simplified model is developed consisting of only those variables which uniquely contribute to explaining more than 1 percent of the variance in the dependent variable. Then, dealing only with this reduced number of variables, the differences in $R^2$ between the additive model and models containing interaction terms is calculated.
Tests of significance are not used in the present analysis. The requirement that the data be drawn through a random sampling procedure is clearly not met. The data approximate the population of cases sentenced within the described jurisdictional, geographical, and temporal boundaries. No inferences are made to a larger population. The degree to which the presently reported relationships apply to other populations is best established through replication. These cases are not assumed to be representative of dispositions in other states, nor even representative of dispositions in Montana during another time period. Tests of significance might be used to evaluate whether various relationships were due to random measurement error or to randomly operating extraneous variables. However, the assumptions involved in the use of analysis of variance and t-tests of regression statistics are not adequately met by the data. Furthermore, the author is convinced by the arguments of Selvin and others concerning the questionable value of such tests. In contrast to the difficulties involved in the use of such tests of significance, Bohrnstedt and Carter have demonstrated

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83 Selvin, pp 94-106.
that in circumstances such as the present, the descriptive regression statistics used are quite robust.  

The Model

The regression analysis involves estimating the parameters of the recursive model in Figure 2. A comparison between the power—conflict model in Figure 1 and the model in Figure 2 reveals that the intervening variables between the socio-biographical characteristics such as age and education and the sentencing outcome are absent in the second model. Direct measures of the offender's degree of legal sophistication, his ability to hire an effective lawyer, his ability to cause strains for the officers of the legal system, or the offender's "power" are not present in the data. Those intervening variables involved in the other models of the assignment of criminal status through sentencing are also unavailable. In regard to the models based on sentencing ideologies, there are no indicators of the judges' motivations or their orientations toward the various sentencing ideologies and objectives. And there are no measures of the judges' perceptions or attributions which are involved in the theories of racial discrimination on the basis of stereotypes. Thus, estimating the parameters of the model in Figure 2 is a less complete test of the

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Although not represented in the figure with curved lines, correlations among the exogenous variables are assumed to exist and are taken into account.
explanations embodied in the various models than might be desired. Nevertheless, as described earlier, each of the models implies different relationships between the various socio-biographical offender attributes and the adjudication of guilt. Thus these alternative models may be evaluated in terms of the degree to which they are consistent with the estimated parameters of the model in Figure 2.

The effects of each variable in the model in Figure 2 are evaluated by presenting and interpreting the standardized partial regression coefficients in a path analytic framework. Similarly, the MCA coefficients may be interpreted in a manner analogous to the interpretation of path regression coefficients.

This use of path analysis requires several assumptions. A causal order is easily assumed between the offender-offense characteristics and the sentencing decision. Another necessary assumption is that the relationships among the variables are causally closed. The model in Figure 2 is a combined model which does not represent any single previously discussed model derived from the theories of the assignment of criminal status through the formal adjudication of guilt. Rather it includes indicators of virtually all those variables which were suggested as important. The absence of variables representing the

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reduction of charges and the recommendations of the probation officer and prosecuting attorney the most likely source of violations of the assumption that all the important variables are in the model.

Although a time order may be assumed among the various variables representing the attributes of the offenders, offense, and judges, the adjudication of guilt is simply regressed upon the entire set of variables in one step. The approach of first regressing the later offender characteristics (such as the number of prior felony convictions) upon the earlier offender characteristics (such as ethnicity), and regressing the type of sentence upon all the offender-offense attribute variables only upon the last step can and has been used by others. This procedure is rejected in this case for two reasons. First, since many of the intervening variables are represented by dummy variables, such an analysis would be excessively complex. Second, the additional information provided may easily be misinterpreted and does not substantially contribute to answering the questions with which we are concerned. This is because the data represent a population of those persons sentenced for state felony convictions; they do not represent the population of persons in the state. Therefore, the "effect" (as

indicated by a path coefficient) of ethnicity upon education or upon the number of prior offenses, does not represent the magnitude of such effects in the state population at large. When all the variables involved in a regression model are dummy variables, the size of B and R are dependent upon the proportion of cases in each category represented by each dummy variable. Quite a large number of situations, such as native American-white differentials in the likelihood that charges will be dropped, may influence these proportions and thus confound the interpretation of the "effects" among the offender attributes. Because of these difficulties, many of the correlations among the variables representing offender-offense attributes are left unanalyzed. Instead, attention is directed toward the direct effects and zero-order correlations between the background variables and the formal adjudication of guilt.
A Partial Replication of the Previous Study by Chiricos, Jackson, and Waldo

The first objective of the present research is to compare the data from Montana with the data from Florida previously presented by Chiricos, Jackson, and Waldo. The percentage of probationers adjudicated guilty within various categories of background characteristics are presented in Table 1. In those cases where identical variables were included in both studies, the percentages reported in the previous study are presented adjacent to the comparable figures from the Montana data.

Overall, the percentage of the probationers in Montana who were adjudicated guilty (23.1 percent) was smaller than the percentage of probationers adjudicated guilty in Florida (32 percent). Within almost every category of the independent variables, the proportion of offenders adjudicated guilty was larger among the Florida probationers than among the cases from Montana. An exception to this overall difference is found among those offenders who had had one or more prior felony convictions, probation, or paroles. Repeated offenders in Montana were more likely to be adjudicated guilty than similar offenders in the cases from Florida.
## TABLE 1

Percentage of Probationers Adjudicated Guilty by Background Characteristics: A Comparison Between the First Data Set and Those Cases Examined by Chiricos, Jackson, and Waldo

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 21</td>
<td>21.4 (1002)</td>
<td>11.7 ( 565)</td>
</tr>
<tr>
<td>21-25</td>
<td>32.8 ( 586)</td>
<td>20.2 ( 500)</td>
</tr>
<tr>
<td>26-35</td>
<td>41.3 ( 419)</td>
<td>36.1 ( 324)</td>
</tr>
<tr>
<td>36 and over</td>
<td>48.3 ( 412)</td>
<td>37.9 ( 248)</td>
</tr>
<tr>
<td>C = .30</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>32.2 (2124)</td>
<td>23.0 (1515)</td>
</tr>
<tr>
<td>Female</td>
<td>31.4 ( 280)</td>
<td>23.7 ( 152)</td>
</tr>
<tr>
<td>C = .00</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whites</td>
<td>28.3 (1694)</td>
<td>21.3 (1421)</td>
</tr>
<tr>
<td>Blacks</td>
<td>41.1 ( 708)</td>
<td></td>
</tr>
<tr>
<td>Native Americans</td>
<td></td>
<td>37.9 ( 190)</td>
</tr>
<tr>
<td>C = .18</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-6</td>
<td>49.6 (248)</td>
<td>29.2 ( 48)</td>
</tr>
<tr>
<td>7-9</td>
<td>38.2 ( 652)</td>
<td>33.3 ( 372)</td>
</tr>
<tr>
<td>10-11</td>
<td>28.3 ( 699)</td>
<td>24.7 ( 388)</td>
</tr>
<tr>
<td>H.S. Graduate</td>
<td>25.6 ( 472)</td>
<td>17.5 ( 109)</td>
</tr>
<tr>
<td>Some College</td>
<td>21.7 ( 309)</td>
<td>15.8 ( 190)</td>
</tr>
<tr>
<td>C = .23</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Employment Status</strong></td>
<td></td>
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</tr>
<tr>
<td>Employed Full Time</td>
<td>33.8 (1397)</td>
<td>21.5 ( 789)</td>
</tr>
<tr>
<td>Employed Part Time</td>
<td>30.2 ( 199)</td>
<td></td>
</tr>
<tr>
<td>Unemployed</td>
<td>36.6 ( 476)</td>
<td>24.1 ( 826)</td>
</tr>
<tr>
<td>C = .16</td>
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<td></td>
</tr>
</tbody>
</table>
### TABLE 1 (continued)

<table>
<thead>
<tr>
<th>Background Characteristics</th>
<th>Percent Adjudicated Guilty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>9.8 ( 193)</td>
</tr>
<tr>
<td>Other</td>
<td>32.5 ( 120)</td>
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<tr>
<td>$C = .19$</td>
<td>$C = .05$</td>
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<table>
<thead>
<tr>
<th>Level of Occupational Skill</th>
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<tbody>
<tr>
<td>Professional</td>
</tr>
<tr>
<td>Skilled</td>
</tr>
<tr>
<td>Unskilled</td>
</tr>
<tr>
<td>$C = .05$</td>
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</table>

<table>
<thead>
<tr>
<th>Marital Status</th>
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</thead>
<tbody>
<tr>
<td>Single</td>
</tr>
<tr>
<td>Married</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>$C = .23$</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of Dependents</th>
</tr>
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<tbody>
<tr>
<td>None</td>
</tr>
<tr>
<td>One</td>
</tr>
<tr>
<td>Two</td>
</tr>
<tr>
<td>Three</td>
</tr>
<tr>
<td>Four or more</td>
</tr>
<tr>
<td>$C = .16$</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Prior Felony Convictions</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
</tr>
<tr>
<td>One</td>
</tr>
<tr>
<td>Two or more</td>
</tr>
<tr>
<td>$C = .37$</td>
</tr>
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TABLE 1 (continued)

<table>
<thead>
<tr>
<th>Background Characteristics</th>
<th>Percent Adjudicated Guilty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prior Probations</strong></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>29.7 (2157)</td>
</tr>
<tr>
<td>One or more</td>
<td>52.8 (252)</td>
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<td>C = .21</td>
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<td><strong>Prior Paroles</strong></td>
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<td>One or more</td>
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<td>One</td>
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<tr>
<td>Two or more</td>
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<td>C = .07</td>
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<td><strong>Prior Juvenile Offenses</strong></td>
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<td>Two or more</td>
<td></td>
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<td><strong>Prior Juvenile Incarcerations</strong></td>
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<td><strong>Type of Offense</strong></td>
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<tr>
<td>Personal</td>
<td>43.3 (351)</td>
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<tr>
<td>Property</td>
<td>30.6 (1080)</td>
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<tr>
<td>Other</td>
<td>28.6 (906)</td>
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<td>C = .16</td>
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<td>C = .19</td>
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TABLE 1 (continued)

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<tr>
<th>Background Characteristics</th>
<th>Percent Adjudicated Guilty(^a)</th>
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<tr>
<td></td>
<td>Florida, 1969</td>
</tr>
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<td>Montana, 1966-1971</td>
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<tr>
<td><strong>Type of Plea</strong></td>
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<tr>
<td>Guilty</td>
<td>33.7 (1598)</td>
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<td>Nolo Contendere</td>
<td>19.9 (468)</td>
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<tr>
<td></td>
<td>69.2 (13)</td>
</tr>
<tr>
<td></td>
<td>22.7 (1645)</td>
</tr>
</tbody>
</table>

\(\bar{C} = .23\) \hspace{2cm} \(\bar{C} = .10\)

\(^a\) The total number of cases within each category, the base upon which the percentages are calculated, are presented in parentheses. The total N for the cases from Montana varies from category to category and is larger than the number of cases analyzed in the regression analysis because a pair-wide deletion (as opposed to list-wise) was used to eliminate missing cases.
In terms of the directions of the relationships between the offender-offense background characteristics and the adjudication of guilt, the two sets of data from Florida and Montana are quite comparable. In eleven of the fourteen relationships compared, the direction of the associations between the background characteristics and the adjudication of guilt were identical in both sets of cases. Formal adjudication of guilt was positively associated with the number of prior felonies, the number of prior paroles, the number of prior probation, minority group status, age, a juvenile record, pleading "not guilty," being married, and the number of dependents. A negative relationship existed between the adjudication of guilt and the level of education and employment.

The differences within levels of occupational skill constituted one of the cases where the relationships found among probationers in Montana were inconsistent with the relationship among probationers in Florida. Among the Florida probationers, the percentage of offenders adjudicated guilty increased with the level of occupational skill. In the Florida data, 22.4 percent of the unskilled workers were adjudicated guilty as compared to 24.0 percent of the skilled workers, and 28.1 percent of those in occupations involving higher levels of skill. Among the cases from Montana, the highest percentage of probationers adjudicated guilty was among skilled workers (35.2 percent), while the percentage adjudicated guilty was less among unskilled workers (31.5 percent) and still less...
among those with relatively high levels of occupational skill (27.9 percent). In both sets of cases the level of occupational skill was one of the independent variables which was least strongly associated with the adjudication of guilt. Out of this number of comparisons, a difference between the two sets of this small a magnitude is not surprising.

The direction of the association between sex and the type of sentence also differs between the two sets of cases; however, the trivial size of this association ($C < .01$) among probationers from both Florida and Montana indicates that the association is essentially zero in both sets of data. Not so trivial is the difference between the two sets of cases in the relationship between the sentence and the type of offense. In the Florida data, the percentage of probationers adjudicated guilty was greater among those cases involving offenses against persons than those cases involving offenses against property. The opposite was true in the Montana data.

If the independent variables are ranked in order of the strength of their relationship with the adjudication of guilt, the rankings for each set of cases are quite similar. In both sets of data, the number of prior felony convictions was most strongly associated with the type of sentence. Sex and level of occupational skill were least associated with the adjudication of guilt.
In both sets of data, the legal variables were generally more highly associated with the adjudication of guilt than were the socio-biographical variables. However, the greatest difference between the cases from Florida and those from Montana was in the relative magnitude of the apparent effects of the legal variables, vis-a-vis the effects of the socio-biographical variables. The association between legal characteristics and the adjudication of guilt were stronger among the cases sentenced in Montana than among the cases sentenced in Florida. For example, the association between the number of prior felony convictions and the type of sentence was stronger among the Montana cases ($\overline{C} = .49$) than among Florida cases ($\overline{C} = .37$). The same is true in regard to the size of the associations between the type of sentence and the number of prior probations, the number of prior paroles, the number of juvenile offenses, and the type of offense.

On the other hand, the magnitudes of the relationships between the socio-biographical characteristics and the type of sentence were greater in the Florida data than in the Montana data. The relationships between the type of sentence and age, race, education, employment status, and marital status were all moderately stronger in the Florida data than in that from Montana.

In short, the relationships found in the data regarding probationers in Montana are in general quite comparable to those found in Florida.
by Chiricos, Jackson, and Waldo. The differences between the two sets of cases consist mainly of moderate differences in the magnitude of these relationships. Discussion of the implications of these findings for the theoretical models of the assignment of criminal status is deferred until after the presentation of the results of the multivariate analysis.

**Multivariate Analysis: The Additive Model Applied to the First Data Set**

The estimated parameters of the additive combined model (Figure 2) applied to the first data set are presented in Table 2. Examination of the gross effects indicates that the different category breaking points used in the multivariate analyses do little to change the overall patterns of relationships observed in the analysis directed toward replication. However, some additional information is produced. First, the change in the age categories reveals that while the proportion of probationers adjudicated guilty generally increases with age, the proportion adjudicated guilty is greater for those between thirty and thirty-nine than for those over forty. This suggests that the relationship between age and the adjudication of guilt is non-monotonic; age is positively associated with the adjudication of guilt up to the point of middle-age, whereupon the relationship becomes negative. After additional categories are added to represent different levels of occupational skill, the relationship between this variable and the adjudication of guilt remains weak and difficult to interpret. Separating out individual offense...
TABLE 2

Multiple Classification Analysis: Gross and Net Additive Effects of the Independent Variables Upon the Probability of Being Formally Adjudicated Guilty Among Probationers

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Gross Effect</th>
<th>Net Effect</th>
<th>Sheaf Coefficient</th>
<th>Multiple Partial R²</th>
<th>N</th>
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<tr>
<td><strong>Socio-Biographical</strong></td>
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<td>Age</td>
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<td>21-25</td>
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Legal
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TABLE 2 (continued)

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<th>Independent Variables</th>
<th>Gross Effect&lt;sup&gt;a&lt;/sup&gt;</th>
<th>$R^2$</th>
<th>Net Effect</th>
<th>Sheaf Coefficient</th>
<th>Multiple $R^2$</th>
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<td>Severity of the Judge</td>
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<td>-.12</td>
<td>.240</td>
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<td>The Grand Mean of the Dependent Variable = .24</td>
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<td>$R^2 = .362$</td>
<td>$N = 1553$</td>
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</table>

<sup>a</sup>The gross effects are expressed in terms of unadjusted deviations from the grand mean.

<sup>b</sup>In this case $R^2 = \eta^2 = \text{Eta}^2$.

<sup>c</sup>These effects represent adjusted deviations from the grand mean.

<sup>d</sup>The sheaf coefficient is a multiple partial regression coefficient, and is interpreted as a path coefficient.

<sup>e</sup>This represents the variance uniquely accounted for by each theoretical variable.
categories reveals the tendency to grant drug offenders deferred sentences. Aside from the larger proportion of offenders adjudicated guilty for forgery and passing bad checks, the differences between property offenses and offenses against persons appear insignificant. Finally, the new variable representing the severity of the judge reveals substantial differences between judges in the proportion of probationers adjudicated guilty.

When no controls are imposed to hold the value of the other variables constant, the number of prior felonies accounts for 24 percent of the variance in the type of sentence. None of the other variables accounts for nearly the same percentage of variance in the dependent variable. The age of the offender, the type of offense, and the severity of the judge each explain approximately 8 percent of the variance. Marital status, possessing dependents, education, ethnicity, juvenile institutionalization, and the type of plea individually explain 1 percent to 3 percent of the variance. Of the remaining variables, neither sex, occupation, nor employment can account for as much as 1 percent of the variance. There is obviously, however, a degree of overlap between these independent variables, for all the variables in combination account for only 36 percent of the variance in the adjudication of guilt. Only six of the thirteen independent variables can uniquely explain more than 1 percent of the variance in the dependent variable after the variance explained by the other variables has been removed.
The net effects reveal that the effects of each of the independent variables are reduced after adjustments are made for the effects of the other independent variables. After such adjustments the association between the type of sentence and the socio-biographical variables, age, education, ethnicity, and marital status do not disappear or change direction, but they do become smaller. This shrinkage between the gross and net effects of each of these variables is primarily due to the associations between these independent variables and the number of prior felonies. Before adjustments, the proportion of probationers adjudicated guilty among those between eighteen and twenty years of age was .34 smaller than among those between thirty and thirty-nine years of age. After adjustments, the difference was .15. This and other analysis reveals that much but not all of the association between age and the type of sentence is explained by the moderately strong positive associations between age and the number of prior felonies, and between the number of prior felonies and the adjudication of guilt.

In terms of unadjusted effects, probationers in the lowest and highest categories of educational attainment differ by .21 in the likelihood of being adjudicated as guilty. The adjusted effects reveal a difference of only .03 between these categories of probationers. Much of this difference between the gross and net effects of education is due to the negative relationships between the level of educational attainment and both age and the number of prior felonies.
The size of the native American-white differential changes from .18 before adjustment to .10 after adjustments. This and other analysis showed that the gross effect of being a native American was greater than the net effect primarily because native Americans tended to have more prior convictions than whites. Virtually none of the total association between being a native American and being adjudicated guilty was due to the indirect effects of ethnicity through occupation, education, and employment.

Even after adjustments, the probability of having been adjudicated guilty was .05 greater for married probationers than for those who were single. However, the net effect of having dependents shows the opposite relationship to that indicated by the gross effect. Before adjustments, the probability of a probationer having been adjudicated guilty was .11 greater for those probationers with dependents than for those without dependents. Net of the effects of the other variables, the probability was .05 less for those with dependents than for those without dependents.

The net effects of the level of occupational skill and the probationer's employment status showed virtually no relationship between these variables and the dependent variable. The apparent effects of being in the non-employed category (retired and housewives) is difficult to interpret and is discounted because of the very small number of probationers in this category (16).
In contrast to the situation regarding the other socio-biographical characteristics, the net effects of the variable sex are slightly greater than its gross effects. The gross effects show no male-female difference, but after controlling for the other variables females appear very slightly less likely to be adjudicated guilty than males.

Generally, the net effects of the legal offender-offense characteristics are much greater than the net effects of the socio-biographical characteristics. The net effect of the number of prior felonies is substantial and is much greater than the effect of any of the other variables. Among probationers who were equal in terms of all of the other offender-offense characteristics, the probability of having been adjudicated guilty was .16 for the first-time offender, .70 for the probationer with one prior felony conviction, and .80 for the probationer with two or more prior felony convictions. Most probably due to the effects of plea bargaining, those who plead innocent were much more likely to be adjudicated guilty than those who plead guilty. Considering the size of this effect of not pleading guilty, it is perhaps not surprising that very few of these offenders (12) plead otherwise. This small number of cases involving pleas of not guilty also suggest the possibility that those pleading not guilty were much more likely to have received non-probationary sentences (imprisonment) and thus were not included in this data set.
In comparison to the effect of the number of prior felonies, the effects of the type of offense and prior institutionalization as a juvenile were small. Net of the effects of the other variables, probationers who had been institutionalized as juveniles had a probability of .27 of having been adjudicated guilty. Among the probationers with no such history, this probability was .24. Of the offense categories, drug related offenses were the least likely to result in the formal adjudication of guilt. Even net of the effect of the number of prior felonies and the other variables, probationers sentenced for drug offenses were adjudicated guilty 16 percent of the time as compared to 24 percent for the average probationer.

The gross effects of having been sentenced for forgery (.19) or passing bad checks (.15) are apparently mostly due to the high proportion of repeated offenders committing these offenses. The net effect of having committed either offense was only .03. It is surprising that having committed one of the more serious offenses against persons appears to have had no effect upon the likelihood of having been adjudicated guilty. This may be due to most of the offenders sentenced for this type of offense having been imprisoned and thus omitted from this data set.

The last variable, the severity of the judge, apparently had a substantial effect upon the type of sentence. Net of the differences in the types of offenders they sentenced, only 12 percent of the probationary sentences imposed by the least severe judges involved formal adjudication of guilt. On the other hand, 20 percent of the probationary sentences
imposed by the "average" judges, 27 percent of such sentences imposed by the "severe" judges, and 49 percent of such sentences imposed by the "more severe" judges involved formal adjudication of guilt.

In using these various statistics to assess the "importance" of each of the independent variables, it should be remembered that the standardized measures (\( p \), \( R^2 \), sheaf coefficients) are not distribution free. If being in a particular category greatly increases the probability of being adjudicated guilty (as indicated by the "net effect"), the variable containing that category may still not be an important "determinant" of the type of sentence (as indicated by the sheaf coefficient or \( R^2 \)) if the number of persons in that category is very small. Thus, if Albanians were discriminated against to a high degree, a variable representing present or former Albanian citizenship would not go very far in explaining the total variation in sentencing if only two Albanians were sentenced. The categories actually examined do not involve such extreme cases, but the distinction between importance in terms of "differentials" (as indicated by the "gross" and "net effects") and importance in terms of "determination" (as indicated by \( p \) or \( R^2 \)) should be kept in mind.

In terms of the determination of whether or not a probationer was adjudicated guilty, the relative importance of each of the theoretical variables vis-a-vis each other can best be evaluated by comparing their net standardized effects (sheaf-path coefficients) and their unique contributions to the explained variance (multiple-partial \( R^2 \)). Using these...
criteria, the number of prior felonies was by far the most important variable ($p = .418$, unique variance explained = 14 percent). The second most important variable was the severity of the judge ($p = .240$, unique variance explained = 5 percent). Next in importance were age ($p = .117$), the offense category ($p = .105$), plea ($p = .094$) and ethnicity ($p = .078$), each of which uniquely contributed approximately 1 percent to the explained variance.

A common practice in path analysis is the deletion of those causal paths for which $p \leq .05$. The sheaf coefficients associated with the variables, prior felonies, age, severity of the judges, type of offenses, plea, ethnicity, education, marital status, and the number of dependents were greater than or equal to .05. Not meeting this criterion were the variables occupation, employment, sex, and institutionalization as a juvenile.

The proportion of the variance in the dependent variable accounted for by sets of the independent variables is presented in Table 3. Alone, the set of socio-biographical characteristics accounts for 13.2 percent of the variance in the type of sentence. The set of legal characteristics accounts for 27.5 percent of this variance. While the socio-biographical set can only explain 3.3 percent of the variance over that explained by the legal set, the legal set explains 17.6 percent of the variance over that accounted for by the socio-biographical set.
TABLE 3

The Variance Accounted for by Sets of the Independent Variables
(In the First Data Set Consisting of Probationers)

<table>
<thead>
<tr>
<th>Variable Sets</th>
<th>$R^2$</th>
</tr>
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<tbody>
<tr>
<td>1. Socio-Biographical Characteristics</td>
<td>.132</td>
</tr>
<tr>
<td>2. Legal Background Characteristics</td>
<td>.275</td>
</tr>
<tr>
<td>3. The Judge</td>
<td>.063</td>
</tr>
<tr>
<td>4. Socio-Biographical and Legal Background Characteristics</td>
<td>.308</td>
</tr>
<tr>
<td>5. Socio-Biographical and Legal Background Characteristics and the Judge</td>
<td>.362</td>
</tr>
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</table>

Multivariate Analysis: The Additive Model
Applied to the Second Data Set

The analysis dealing with the first data set describes the effects of the independent variables upon the probability of being adjudicated guilty among persons given probationary sentences. It is also valuable to examine the effect of these variables upon the probability of any offender being adjudicated guilty. The estimated parameters of the additive combined model (Figure 2), as applied to the second data set, are presented in Table 4.

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87 The second data set differs from the first not only in terms of the types of dispositions included, but also in terms of the time interval involved (Supra, page 55).
TABLE 4

Multiple Classification Analysis: Gross and Net Additive Effects of the Independent Variables Upon the Probability of Being Formally Adjudicated Guilty Among Offenders in the Second Data Set

<table>
<thead>
<tr>
<th>Offender Characteristics</th>
<th>Independent Variables</th>
<th>Gross Effect</th>
<th>$R^2$</th>
<th>Net Effect</th>
<th>Sheaf Coefficient</th>
<th>Multiple</th>
<th>Partial $R^2$</th>
<th>N</th>
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</thead>
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<tr>
<td>Socio-Biographical</td>
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<td></td>
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<td></td>
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<tr>
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<td>18-20</td>
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<td>-.14</td>
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<td>.04</td>
<td>-.01</td>
<td>.08</td>
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<td></td>
<td>26-29</td>
<td>.03</td>
<td>.03</td>
<td>.02</td>
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<td>.00</td>
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<td>30-39</td>
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<td>.07</td>
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<td>.11</td>
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<td>.00</td>
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TABLE 4 (continued)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Gross Effect</th>
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<th>Multiple Partial $R^2$</th>
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<td>Ethnicity</td>
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<td>Sheaf Coefficient</td>
<td>Multiple $R^2$</td>
<td>Partial $R^2$</td>
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<td>------------</td>
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TABLE 4 (continued)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Gross Effect $^a$</th>
<th>$R^2$ $^b$</th>
<th>Net Effect $^c$</th>
<th>Sheaf Coefficient $^d$</th>
<th>Multiple Partial $R^2$ $^e$</th>
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</thead>
<tbody>
<tr>
<td>The Judge</td>
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<td>Severity of the Judge</td>
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</tr>
<tr>
<td>Least Severe</td>
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<td>.037</td>
<td>-.15</td>
<td>.193</td>
<td>.033</td>
<td>81</td>
</tr>
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<td>.01</td>
<td></td>
<td></td>
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<td>Severe</td>
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<td>-.08</td>
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<td></td>
<td>73</td>
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<tr>
<td>Most Severe</td>
<td>.09</td>
<td></td>
<td>.08</td>
<td></td>
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<td>229</td>
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<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>The Grand Mean of the Dependent Variable = .73</td>
<td>$R = .525$</td>
<td>$R^2 = .276$</td>
<td>N = 515</td>
</tr>
</tbody>
</table>

$^a$ The gross effects are expressed in terms of unadjusted deviations from the grand mean.

$^b$ In this case $R^2 = \beta^2 = Eta^2$.

$^c$ These effects represent adjusted deviations from the grand mean.

$^d$ The sheaf coefficient is a multiple partial regression coefficient, and is interpreted as a path coefficient.

$^e$ This represents the variance uniquely accounted for by each theoretical variable.
In general, the direction and nature of the associations between the independent variables and the formal adjudication of guilt are the same in the second data set as in the first. The ranking of the variables in terms of their apparent importance in determining the type of sentence is also roughly the same in both cases. Despite this general agreement between the two analyses, there are also significant differences.

One of the most important differences is that the effects of the socio-biographical characteristics, as well as the effects of the type of offense and prior institutionalization as a juvenile, are all significantly larger when calculated upon the different base involved in the second data set. At the same time, the effects of the number of prior felonies, the type of plea, and the severity of the judge are smaller in this set of data.

The association between institutionalization as a juvenile and the adjudication of guilt is quite striking in these data. Prior institutionalization as a juvenile appeared to have virtually no effect in Table 2. However, among the cases described in Table 4, the probability of being adjudicated guilty was .92 for those who had been institutionalized as compared to .69 for those who had not. In the second data set, the

---

88 The smaller apparent variation between judges is probably largely an artifact of the manner in which the judges were categorized. The judges were categorized on the basis of the first data set. Thus the categories reflect the maximum between judge variation in the first data set, but not in the second.
standardized effect of prior institutionalization as a juvenile was even greater than the standardized effect of the number of prior felonies.

What could account for these differences between Table 2 and Table 4? There are several possible explanations, each or all of which may apply. First of all, it is possible that these differences are simply due to random variation in the disposition of cases; however, there are more interesting explanations.

Between 1966 and 1972 the proportion of cases which involved formal adjudication of guilt decreased steadily and dramatically.® The cases in the second data set were sentenced between July 1, 1966, and December 31, 1967, as compared to the cases in the first data set which covered the period from July 1, 1966 to December 31, 1971. It is possible that not only the total proportion of offenders adjudicated guilty, but also the effects of certain offender characteristics upon the likelihood of the adjudication of guilt changed over time. Such a change might be a function of either changes in attitudes or the changes in the average proportion of cases adjudicated guilty. The data are consistent with a hypothesis that the socio-biographical characteristics of offenders

---

89 Judges and other law enforcement officials attributed this trend to several factors: (1) changes in the attitudes of judges toward leniency and the use of the deferred sentence, (2) a rise in the number of convicted offenders at a time when the state's penitentiary was already overcrowded, thus necessitating the use of more probationary sentences, and (3) a dramatic increase in the number of first-time offenders sentenced for drug-related offenses (such offenders were treated much more leniently, Supra Tables 2 and 4).
have more effect on whether or not an offender is adjudicated guilty when the average proportion of offenders adjudicated guilty is large.

Another possible explanation is illustrated through the use of the hypothetical distribution of cases in Table 5. If the association between possessing attribute "X" and the adjudication of guilt (suspended sentences or imprisonment) is calculated among those offenders receiving probationary types of sentences, the association is zero (Table 5). Among probationers, 50 percent of those with attribute "X" were adjudicated guilty and 50 percent of those without attribute "X" were likewise adjudicated guilty. However, if the association between attribute "X" and the adjudication of guilt is calculated among all offenders, there is a positive association. Among offenders, $300 + 50 = 350$ or 87.5 percent of those with attribute "X" were adjudicated guilty while only $50 + 100 = 150$ or 75 percent of those without attribute "X" were adjudicated guilty.

<table>
<thead>
<tr>
<th>TABLE 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Hypothetical Crosstabulation Between Attitude &quot;X&quot; and the Type of Sentence</td>
</tr>
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</table>

<table>
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<th>Sentence</th>
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<tr>
<td></td>
<td>Probation</td>
</tr>
<tr>
<td></td>
<td>Deferred</td>
</tr>
<tr>
<td>Has It</td>
<td>50</td>
</tr>
<tr>
<td>Doesn't Have It</td>
<td>50</td>
</tr>
</tbody>
</table>

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It is necessarily true that if any attribute "X" increases both the likelihood that an offender will receive a suspended sentence and also the likelihood that an offender will receive a sentence of imprisonment, then the "effects" of attribute "X" upon the likelihood of being adjudicated guilty will be larger when calculated upon the base of all offenders than when calculated upon the basis of probationers only. Thus, the fact that the effects of socio-biographical characteristics such as age and ethnicity were larger in the second data set than in the first may be due to these characteristics also having been associated with whether or not an offender received any kind of probationary sentence.

A final possible explanation for the differences between Table 2 and Table 4 is based on the possibility of interaction effects between the number of prior felonies, the other independent variables, and the type of sentences. The second data set contains a significantly larger proportion of repeated offenders than does the first data set. If the relationships between some of the independent variables and the dependent variable are stronger among offenders with prior felony convictions than among first-time offenders, the effects of these independent variables would be larger in the second data set than in the first.

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90 This fact does not undermine the legitimacy of examining such effects through the use of the first data set. The examination of these effects among probationers is justified by the reasoning that, consistent with our theoretical concerns, it is important to observe differences in the assignment of criminal status among offenders whose sentences differ in virtually no other respect.
However, as shown in the following section, the effects of at least some socio-biographical characteristics are the same or weaker among those cases which involve offenders with one or more prior felony convictions.

**Multivariate Analysis: Non-Additive Models**

All of the multivariate analysis up to this point has involved the assumption that the effects of the various characteristics of the offender, offense, and judge upon the formal adjudication of guilt are additive. In this section the possibility of important non-additive effects is examined and evaluated. The first step in this direction will involve the examination of those cases of statistical interaction ("specification" in the language of elaboration) described by Chiricos, Jackson, and Waldo. However, rather than using contingency table analysis as did Chiricos, et al., statistical interaction is assessed by comparing the net effects of particular variables (as indicated by the full combined additive model in Figure 2) within subgroups of the first data set. More specifically, the net effects of age, education, and ethnicity are estimated separately for those probationers with no prior offense, those with one prior offense, and those with two or more prior offenses.

Chiricos, et al., reported that age differences increased with the number of prior felony convictions. In the Montana data, the net effects of age upon the adjudication of guilt appear to generally decrease.
or reverse among those offenders convicted of one or more prior felonies (Figure 3).

FIGURE 3

The Effects of Age Within Categories of the Number of Prior Felony Convictions (Among the Probationers)\(^9\)

<table>
<thead>
<tr>
<th>Subgroup</th>
<th>Age Range</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>18-20</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>19-24</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>25-30</td>
<td>48</td>
</tr>
<tr>
<td>3</td>
<td>18-20</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>21-25</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>26-29</td>
<td>37</td>
</tr>
<tr>
<td></td>
<td>30-39</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td>40+</td>
<td>142</td>
</tr>
</tbody>
</table>

Subgroup 0: Those with no prior felony convictions.

Subgroup 1: Those with one prior felony conviction.

Subgroup 2: Those with two or more prior felony convictions.

\(^9\) The number of cases in each category are indicated adjacent to the points representing those categories.

\(\text{No attempt is made to interpret the uneven fluctuations in effects of age among those with one or more prior felonies, due to the small number of cases involved in several of the categories.}\)
On the other hand, the negative relationship between the level of education and the adjudication of guilt generally remains the same regardless of the number of prior felony convictions (Figure 4). This finding also conflicts with the relationships described in the data from Florida.

FIGURE 4

The Effects of Education Within Categories of the Number of Prior Felony Convictions (Among the Probationers)\(^a\)

---

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Adj. Guilty</th>
<th>Deferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subgroup 0: Those with no prior felony convictions.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subgroup 1: Those with one prior felony conviction.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subgroup 2: Those with two or more prior felony convictions.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\) The number of cases in each category are indicated adjacent to the points representing those categories.
In the previous study in Florida, social differences were found to decrease with the number of prior felony convictions. The present data show somewhat the same pattern, but the small number of probationary sentences involving native Americans with two or more prior felony convictions casts doubt upon the significance of this finding (Figure 5).

**FIGURE 5**

The Effects of Ethnicity Within Categories of the Number of Prior Felonies (Among the Probationers)^a

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Subgroup 0: Those with no prior felony convictions.</th>
<th>Subgroup 1: Those with one prior felony conviction.</th>
<th>Subgroup 2: Those with two or more prior felony convictions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adj. Guilty</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deferred</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The number of cases in each category are indicated adjacent to the points representing those categories.

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As noted earlier, a number of writers have suggested that the degree of racial discrimination in sentencing varies with the type of offense involved. Specifically, discrimination has been expected to be more prevalent in capital cases and in offenses against persons. The size of the net native American-white differences in the proportion of offenders adjudicated guilty within each offense category are shown in Table 6. The small number of native Americans in most of these categories prevents drawing any strong conclusions. Yet it is apparent that differences in dispositions of native American and whites sentenced for offenses against property account for most of the total differences between native Americans and whites.

The total number of possible interaction effects among the large number of independent variables and the dependent variable in the total combined model is so large as to make the examination of all such effects unreasonable. Therefore, in order to examine the possibility of the presence of important interaction effects, a more parsimonious approach was taken. The previous analysis revealed that of the independent variables only six uniquely accounted for 1 percent or more of the variance in the dependent variable. The examination of the possibility of important interaction effects was then restricted to four of these six
TABLE 6

Net Native American-White Differences in the Proportion of Probationers Adjudicated Guilty Within Specific Offense Categories

<table>
<thead>
<tr>
<th>Offense</th>
<th>Adjusted Native American-White Differential</th>
<th>Number of Native Americans Within Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forgery</td>
<td>.08</td>
<td>33</td>
</tr>
<tr>
<td>Burglary I</td>
<td>.07</td>
<td>31</td>
</tr>
<tr>
<td>Burglary II</td>
<td>.42</td>
<td>8</td>
</tr>
<tr>
<td>Burglary</td>
<td>.04</td>
<td>27</td>
</tr>
<tr>
<td>G. Larceny</td>
<td>.21</td>
<td>16</td>
</tr>
<tr>
<td>Auto Theft</td>
<td>-.04</td>
<td>12</td>
</tr>
<tr>
<td>Bad Checks</td>
<td>.07</td>
<td>7</td>
</tr>
<tr>
<td>Assault II</td>
<td>.02</td>
<td>15</td>
</tr>
<tr>
<td>Less Severe Property</td>
<td>-.03</td>
<td>7</td>
</tr>
<tr>
<td>More Severe Personal</td>
<td>.29</td>
<td>9</td>
</tr>
</tbody>
</table>

*Those offense categories which include less than seven native Americans are omitted.*
most important variables. The proportion of the variance in the type of sentence accounted for by more restricted additive models containing combinations of these four independent variables was then compared to the proportion of variation accounted for by non-additive models. Some of these non-additive models contained terms for all possible interactions (saturated models) while others involved the additive model plus terms for two-way interactions. The results of these comparisons are presented in Table 7.

The additive combined model including all twelve socio-biographical and legal variables (but excluding the severity of the judge) accounted for approximately 31 percent of the variance in the adjudication of guilt (supra, Table 3). The more parsimonious additive models including only the number of prior felony convictions and various combinations of two of the three variables, age, ethnicity, and the type of offense, accounted for 27 percent to 28 percent of the variance in the adjudication of guilt. Thus the twelve variable additive model could only add 3 percent to the variance explained by the more parsimonious three variable additive

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92 The variables representing the plea and the severity of the judge are omitted from this analysis. The extremely small number of probationers who plead not guilty prevented the possibility assessing the interaction between the plea and the other variables. Examination of the interactions between the severity of the judges and the other variables was deferred due to the need to restrict the number of variables in the above analysis (for reasons of computer space). The possibility of some such interactions was investigated through the use of other means, but no important interactions were found.
TABLE 7
The Variance Accounted for by Various Additive and Non-Additive Models Incorporating Only the More Important Variables (Within the First Data Set Consisting of Probationers)

<table>
<thead>
<tr>
<th>Variables Included</th>
<th>Model</th>
<th>df</th>
<th>$R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prior Felonies and Age and Ethnicity</td>
<td>Additive</td>
<td>7</td>
<td>.273</td>
</tr>
<tr>
<td></td>
<td>Saturated</td>
<td>28</td>
<td>.300</td>
</tr>
<tr>
<td>2. Prior Felonies and Offense</td>
<td>Additive</td>
<td>15</td>
<td>.264</td>
</tr>
<tr>
<td></td>
<td>Saturated</td>
<td>40</td>
<td>.285</td>
</tr>
<tr>
<td>3. Prior Felonies and Offense and Age</td>
<td>Additive plus 2-way Interactions</td>
<td>103</td>
<td>.338</td>
</tr>
<tr>
<td>4. Prior Felonies and Offense and Ethnicity</td>
<td>Additive plus 2-way Interactions</td>
<td>55</td>
<td>.302</td>
</tr>
</tbody>
</table>

models. The non-additive models involving three of the four more important variables generally added no more to the explained variance than did the addition of the additive effects of the eight remaining independent variables (3 percent). The non-additive model (additive plus two-way interaction effects) involving the number of prior felonies, the type of offense, and age accounted for 33.8 percent of the variance, as compared to the 28.1 percent accounted for by the additive model. However, the non-additive model in this case requires the addition of
In short, the analysis undertaken does not reveal a non-additive model which would significantly improve upon the variance explained by the additive combined model. While small differences in the effects of some offender-offense characteristics may be noted between subgroups of the probationers, taking into account these differences still does not substantially add to our ability to predict whether or not a probationer was formally adjudicated as guilty.

Summary

The findings of the data analysis may be summarized as follows. In general, those bivariate relationships between offender-offense attributes and the adjudication of guilt reported by Chiricos, et al., were also found in the data regarding probationary sentences in Montana. The formal adjudication of guilt was positively associated with age, native American ethnic background, being married, having dependents, the number of prior felonies, and prior institutionalization as a juvenile. Educational attainment was negatively associated with adjudication of guilt. The probationer's occupational category, employment status, and sex appeared unrelated to the type of sentence. While the differences associated with the legal variables were somewhat larger in the Montana data than in the data examined by Chiricos, et al., the
differences associated with the socio-biographical characteristics of the offenders were slightly smaller among the Montana cases. The differences between judges (unexamined by Chiricos, et al.) appeared to be substantial.

The regression analysis revealed that although the direct net effects of these variables were smaller than their gross effects, the effects of most of the variables did not disappear or change direction after adjustments for the relationships among all the variables in the combined additive model. However, three such changes were noted. The gross effects of marital status and the number of dependents suggested that married offenders and those with dependents were more likely to be adjudicated guilty. Net of the effects of the other variables, marital status made little difference and those with dependents were less likely to be adjudicated guilty than those without dependents.

There were no gross effects of the sex of the offender; however, net of the effects of the other variables, females were slightly less likely to be adjudicated guilty.

Judgements regarding the "significance" or "importance" of the effects of each of the variables depend in part upon how such significance is evaluated. If significance is defined in terms of the ability to uniquely account for at least 1 percent of the variance in the dependent variable, only six of the thirteen variables had significant effects. Of the six, the number of prior felony convictions made by far the most difference, and the severity of the judge was next in importance.
type of offense, age, the type of plea, and ethnicity had significant but smaller effects.

Significance may also be defined in terms of an attribute being associated with a net difference of at least .04 in the conditional probability of an offender having been adjudicated guilty. By this criterion, the differences associated with sex, educational level, marital status, and the possession of dependents were also significant. The effects of occupation, employment status, and institutionalization as a juvenile were negligible by either of the above definitions of significance. Analysis of the second set suggested the possibility that the effects of the socio-biographical variables and the legal variable, "prior institutionalization as a juvenile," were greater when the proportion of offenders adjudicated guilty is calculated upon the basis of all offenders rather than probationers only.

Investigation of interaction effects among the variables showed that the effects of some variables do change slightly, depending upon the value of other variables. However, non-additive models could not substantially improve upon the variance in the dependent variable accounted for by comparable additive models.

Somewhat surprisingly, the combined additive model (Figure 2) which takes into account virtually all of the information appearing in an offender's record could only account for 36.2 percent of the variation in the formal adjudication of guilt. A more parsimonious additive
model including only five of the most important variables (prior felony convictions, type of offense, severity of the judge, age, and ethnicity) could do nearly as well, accounting for approximately 34 percent of this variance.
CHAPTER VI

EVALUATING THE THEORETICAL MODELS

Several theoretical models of the assignment of criminal status within the context of sentencing were outlined in Chapter II. Each of these theoretical models implies somewhat different relationships between various attributes of the offender and offense and the likelihood that an offender will be assigned criminal status through the formal adjudication of guilt. For example, the power-conflict model implies that the age of an offender is negatively associated with the adjudication of guilt; the rehabilitative model suggests that the age of an offender is positively associated with the adjudication of guilt; and if adhered to, the principle of equal treatment would result in age having no direct effect upon the type of sentence.

All of those variables which are presented in the data and which are relevant to the theoretical models of the adjudication of guilt were included in the combined additive model whose parameters were estimated for the Montana data. Thus, the theoretical models can be evaluated on the basis of how well they fit the parameters of the combined additive model estimated in Chapter V. The "goodness of fit" between the theoretical models and data is indicated by the consistency
between the expected and observed effects of each of the independent variables. There are several aspects of the observed and expected effects of the independent variables which can be compared: (1) the directions and magnitudes of the direct effects, (2) the relative importance of particular types of variables, (3) the differences between gross and net effects, and (4) the relative importance of indirect versus direct effects. In the present chapter, the theoretical models of the assignment of criminal status through sentencing are evaluated on the basis of these criteria.

The Power-Conflict Model

The main point of the various versions of the power-conflict theory of criminalization is that despite its supposedly egalitarian ideals the legal system in the United States is characterized by substantial differentials in the treatment of persons who differ in social position. Minority group members, the poor, and the young are expected to suffer most under this system because they lack social position and the components of power which accompany it.

Consistent with the power-conflict model (Figure 1), native Americans were significantly more likely to have been adjudicated guilty. Among probationers, 22 percent of the whites were adjudicated guilty, compared to 40 percent of the native Americans. Part of the discrepancy between native Americans and whites is accounted for by the fact that there were more repeated offenders among the native
American probationers than among the white probationers. Yet, after adjustments had been made to hold constant the effects of all the other independent variables, 33 percent of the native Americans were adjudicated guilty, in contrast to only 23 percent of the whites.

The power-conflict model in Figure 1 was adopted from Chambliss and Seidman's theory of the legal process in complex societies. As discussed earlier, the disadvantages suffered by Blacks and native Americans are represented in the model as due to the socio-economic disadvantages of members of these minority groups. However, in the data examined, very little of the association between ethnicity and the adjudication of guilt was due to the indirect effects of ethnicity through the socio-economic variables.

Decomposition of the association between ethnicity and the type of sentence gives a more complete description of the relationships involved. The direct effect of ethnicity upon the type of sentence (p = .078) accounted for 56.1 percent of the total correlation between ethnicity and the type of sentence (r = .139). The indirect effect of ethnicity through the number of prior felonies accounted for 29.7 percent of this correlation. Only 5.1 percent of this correlation was

93 Chambliss and Seidman, pp. 473-475.
accounted for by the indirect effects of ethnicity through education, level of occupational skill, and employment status, while the remaining 9.4 percent of this correlation was accounted for by other indirect effects. Thus, although the effect of being a native American upon the adjudication of guilt was consistent with the power-conflict model in Figure 1, the means by which that effect took place appear inconsistent with that model.

The direction of the association between educational attainment and the type of sentence was consistent with the power-conflict model. The higher the level of educational attainment, the less likely it was that an offender was adjudicated guilty. However, much of this difference was due to the negative associations between both age and the number of prior felonies. Net of the effects of the other variables, educational attainment still decreased the likelihood that an offender was adjudicated guilty, but the size of this difference was quite small; 25 percent of the probationers with less than nine years of education were adjudicated guilty, while 22 percent of those with thirteen or more years of education suffered the same outcome.

The findings in regard to the effects of the level of occupational skill and employment status were not consistent with the power-conflict model. Those who had previously held those types of occupations which are associated with higher levels of income and prestige were no less likely to be adjudicated guilty than those with lower levels of occupational
skill. Those who were employed were no less likely to be adjudicated guilty than those who were unemployed.

The relationship between age and the adjudication of guilt directly contradicted the power-conflict model. Under the power-conflict model younger offenders are more likely to be criminalized than older offenders. In those cases examined, the proportion of offenders adjudicated guilty generally increased as the age of the offenders increased. Most of this relationship was due to the positive association between age and the number of prior felonies. Nevertheless, net of the effects of the other independent variables, age was still positively associated with having been adjudicated guilty; furthermore, the net effect of age was greater than the effects of any of the other socio-biographical characteristics of the offenders.

Those writing from the power-conflict perspective on criminalization have not been very specific about the expected magnitude of the effects of race and socio-economic status upon sentencing, as compared to the effects of legal variables. Nevertheless, the data analysis makes it quite clear that the set of legal variables had far more effect than did the set of socio-biographical variables.

Clearly, the power-conflict model in Figure 1 does not fit the data very well. This power-conflict model may partly explain the evident disadvantages suffered by native Americans and by those with low levels
of education, but it appears to be an inadequate if not incorrect model of the assignment of criminal status.

The present research has only compared the power-conflict model to the dispositions of cases in the state district courts of Montana between 1966 and 1971. Of course, it is quite possible that the power-conflict model is consistent with sentencing in other places and at other times. It is reasonable to believe that sentencing disparities such as those posited in the power-conflict model are affected by such factors as changes in norms favoring equal treatment, guarantees of the right to legal counsel, and the quality of public defenders, legal aid, and court-appointed lawyers. Yet, proponents of the power-conflict model write as if such factors can make no significant difference in the existence of sentencing disparities. Changes in the degrees to which social distinctions are politicized should also be taken into account. The social significance of ethnic, class, and age distinctions is not a constant; nor are the degrees of influence held by minority, class, and age groupings invariant from time to time and from place to place.

Despite the inadequacy of the power-conflict model in explaining the present data, several arguments may be made in defense of the power-conflict model as it applies to the assignment of criminal status in general. It may be argued that the disadvantages suffered by the poor, native Americans, and the young have their greatest effect during the earlier stages of the legal process. There were proportionately
many more native Americans, unskilled and unemployed workers, and young persons among those to be sentenced than there were in general population. Very few older whites of high socio-economic status were included among those who had been arrested and processed to the point of sentencing. It is possible that the effects of power and influence are at least partly responsible for this situation.

The power-conflict model may also be defended on the grounds that the data examined do not contain adequate indicators of the wealth, prestige, or power possessed by the offenders involved. Better such indicators might be correlated with the adjudication of guilt and might allow a fuller interpretation of the effects of ethnicity.

These arguments in defense of the power-conflict model have much merit. Nevertheless, proponents of the power-conflict perspective have themselves cited sentencing studies utilizing the same or similar indicators of the social statuses of offenders as evidence that the power-conflict model does apply in the context of sentencing. It is in precisely the same context that the present research finds the power-conflict model inadequate.

The "Proper" Criteria for Sentencing: The Rehabilitative Model

The rehabilitative model assumes that most judges believe that rehabilitation is least likely to be accomplished through imprisonment or formal conviction. It further assumes that most judges believe that the probability that an offender will rehabilitate himself is positively...
associated with employment, education, marriage, occupational skill, and possessing dependents, and negatively associated with age and the number of prior felony convictions. Thus, if judges are primarily concerned with accomplishing the objective of rehabilitation, these variables should have an effect upon whether or not an offender is adjudicated guilty.

Ethnicity and prior institutionalization as a juvenile might also be considered relevant to the likelihood that an offender will rehabilitate himself; however, these attributes are generally considered illegitimate criteria for the determination of sentence. The observed effects of these variables contradicted the principle of equal treatment, but did not directly contradict the rehabilitative model. In fact, the effects of these two variables were consistent with the rehabilitative model if it is assumed that native Americans and those who had been institutionalized as juveniles were considered more likely to recidivate.

The effects of age, education, sex, possessing dependents, and the number of prior felonies were all consistent with the rehabilitative model, although the size of the effects of most of the socio-biographical variables were quite small. Despite their predicted effects, the level of occupational skill and employment status had virtually no effect upon the likelihood of the formal adjudication of guilt. Also contrary to predictions, married offenders were slightly more likely to be
adjudicated guilty than were single offenders, even net of the effects of
the other variables.

Among all the independent variables, the effects of the number of
prior felonies were by far the most substantial. The judges may have
seen repeated offenders as the least likely to rehabilitate themselves
under a deferred sentence. They may also have believed that repeated
offenders least deserve the chance to rehabilitate themselves under a
defered sentence.

Although smaller than the effect of the number of prior felonies,
the effect of the age of the offender was larger than the effects of any
of the other socio-biographical variables. This relationship between
age and the type of sentence may have been due to the judges believing
that younger offenders were more likely to rehabilitate themselves
than were older offenders. Another interpretation of the correlation
between age and the adjudication of guilt is also possible. Many
believe that the rate of crime is highest among young persons and that
all other things being equal, young offenders are the most likely to
recidivate. If the judges involved shared this belief, it may be that
younger offenders were treated more leniently not because they were
considered less likely to recidivate, but because the judges were more
tolerant of the norm violations of the young. Norm violations among
the young are often viewed as experimentation and as "part of growing
up," but the behavior of older persons is more likely to be attributed
to a consistent and less changing moral "character." Judges may be
more willing to assign criminal status to the older offenders whose moral status is defined as more fixed than that of the younger offenders.

Overall, it appears that the rehabilitative model is more consistent with the data than is the power-conflict model. Not only the number of prior felonies, but the socio-biographical characteristics as well, may have influenced the sentences through their effects on the judges' perceptions of the probability of the offenders rehabilitating themselves. However, if such a relationship existed, it was primarily due to the effects of age, education, sex, and the number of dependents, and was unrelated to the other socio-biographical variables.

The "Proper" Criteria for Sentencing:
The Principle of Equal Treatment

In the modern United States, the principle of "equal treatment for all" means that the type of sentence should be determined by the nature of the offense and the offender's criminal record, and not by the socio-biographical characteristics of the offender, nor by the peculiarities of the sentencing judge. Besides constituting a norm in itself, this principle is consistent with the sentencing objectives of both retribution and deterrence. Consistent with this principle, the estimated parameters of the combined additive model demonstrates that the number of prior felony convictions was the primary determinant of the type of sentences. Among probationers, the type of offense had a significant effect upon the adjudication of guilt; however, it was much less
important than the number of prior felonies. The type of offense seemed to have more effect when the offenders who were sentenced to prison were included in the cases analyzed (as in the second data set).

Apparently, the type of offense had more effect upon whether or not offenders were given probationary sentences, than upon the type of probationary sentences they received. While these findings are generally consistent with the principle of equal treatment, significant sentencing disparities did exist.

The variations between judges constituted the greatest source of sentencing disparities. In fact, the severity of the judge was the second most important determinant of whether or not an offender was adjudicated guilty. This variable uniquely accounted for 5.4 percent of the variance in the type of sentence. As described earlier, after all of the legal and socio-biographical characteristics of the offenders had been controlled, only 12 percent of the offenders sentenced by the least severe judges were adjudicated guilty, as compared to 43 percent of the offenders sentenced by the most severe judges!

The disparities associated with the ethnic backgrounds and ages of the offenders were smaller than those associated with the severity of the judge, but these disparities did constitute significant violations of the principle of equal treatment. On the other hand, there was no evidence of disparities connected with the differences in employment status or the level of occupational skill.
Thus, the process of the assignment of criminal status through sentencing functioned as if its primary objectives were retribution and/or deterrence. Yet, it fell short of its ideals due to several sources of sentencing discrepancies.

The Hypothesis of Racial Discrimination

The early literature dealing with sentencing disparities associated with race and ethnic background attributed these disparities to "prejudice" as well as to a lack of material resources on the part of minority group members. The observed native American-white differentials in the types of sentences imposed does not demonstrate the influence of "prejudice." Knowledge of the motivations of the judges would be necessary to establish such an explanation. However, the elaboration of the relationships between ethnic status, the components of socio-economic status, and the type of sentence tended to cast doubt upon the alternative explanation that this differential was entirely due to native American differences in material resources.

It seems doubtful that the native American-white sentencing discrepancies were due to a conscious and intentional practice of discrimination against native Americans. However, more attention should be given to the possibility that stereotypes of the native American may have had a subtle influence upon the determination of sentence. It is possible that stereotypes of the native American made it more difficult for native American offenders to be perceived as
capable of self-rehabilitation. Thus native American-white sentencing discrepancies may be the result of a lack of symbolic resources as well as material resources.

There are also a number of other possible explanations of the native American-white differences in the proportion of offenders given deferred sentences. The demeanor or perceived "attitude" of the native American offenders before the court may have differed from that of the white offenders. It is also possible that the judges believed that the reservation environment was less conducive to rehabilitation while on probation than was the typical white community, and were therefore more likely to incarcerate the native American offenders. A more detailed discussion of the native American-white sentencing differentials is beyond the intended scope of this thesis; however, a fuller treatment of this subject can be found in the paper by Hall and Simkus.  

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**Summary**

None of the theoretical models was perfectly consistent with the parameters of the combined additive model estimated from the data examined. Rather, each of the theoretical models seemed to explain only certain aspects of the relationships seen in the data.

The determination of the type of sentence was most consistent with the relationships one would expect if the primary objective of sentencing

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95 Hall and Simkus, pp. 14-21.
were retribution or deterrence. The relationships predicted by the rehabilitative model were quite weak and in some respects absent. Nevertheless, of the various theoretical models, the rehabilitative model alone was consistent with the effects of the age of the offender. The rehabilitative model may provide an explanation for the effects of age, as well as for the small effects of education, sex, and having dependents. Edward Green's description of the dominant sentencing ideology in the United States as concerned with both the objective of rehabilitation and the objective of deterrence, seems to fit the data fairly well.

Although the objectives of deterrence and rehabilitation seem to account for the dominant characteristics of the data examined, a description of the determinants of the type of sentence must include the significant "improper" sources of sentencing disparities. The power-conflict model appears to have been an inadequate model of the determination of whether or not an offender was assigned criminal status through the adjudication of guilt; however, it may explain part of the effects of ethnic background and education upon the assignment of criminal status. The native American-white difference seems to demand alternative explanations as well. Most of the effects of ethnic background upon the type of sentence were direct and not mediated by the effect of the socio-economic variables as is suggested by the power-conflict model.
Finally, full description of the factors influencing whether or not an offender was adjudicated guilty must include not only the characteristics of the offender and his offense but also the characteristics of the judge. The severity of the judge was the second largest source of sentencing disparities and accounted for over 5 percent of the variance in the type of sentence.

Perhaps the most surprising finding was that all of the independent variables in the combined additive model could only account for 36.2 percent of the variance in the dependent variable. The remaining 63.8 percent of the variance should not be attributed entirely to "luck." Measurement error, error introduced by categorizing the independent variables, and non-additive effects all contribute to this unexplained variance. Yet it seems odd that virtually all the information included in the offenders' official records helps so little in predicting the disposition of the offender. One wonders to what degree the determination of whether or not an offender is assigned criminal status must be attributed to random factors.
CHAPTER VII

SUMMARY AND CONCLUSIONS

Much of the activity engaged in by persons within law enforcement institutions involves the identification of those individuals who are seen to pose a threat to the legal (and often the normative) order. Through both informal and formal processes certain persons become those who are watched, those who are under suspicion, and those who are not to be trusted. In this process, the identification of the "outsiders" is based upon the behavior of persons and the meaning given their behavior, but it is also based upon the meaning given the persons. An individual's behavior becomes more than a sequence of acts; it becomes a history. And within that history a person acquires an identity. The person to whom criminal acts are attributed becomes "the criminal." Finally, the assignment of such a criminal status may come to define an individual not only within the institution of law enforcement but also within the community as a whole.

The assignment of criminal status is a matter deserving of great concern because it bears heavily upon the treatment and rights given an individual, and perhaps also upon the subsequent behavior of that individual. Arbitrariness and discrepancies in the assignment of criminal
status are not only a matter of injustice; they may abrogate the effectiveness of law enforcement as well. Labeling theorists have elaborated upon the relevance of "the looking-glass self" to the formation of a criminal identity. If criminal status is needlessly assigned to a person, that person may fulfill the criminal expectations made of him. As Lemert points out, discrepancies in the assignment of criminal status may produce an even more powerful commitment to a deviant identity. The person unjustly expected to be a criminal may fulfill those expectations with a vengeance.

Criminal status may be assigned in a variety of ways and degrees. This study has been concerned with one particular form of the assignment of criminal status, the assignment of the status "convicted felon" through the formal adjudication of guilt. It has been argued that a judge’s decision regarding whether or not to defer sentencing and the formal adjudication of guilt is of no small significance.

In particular, this study has been concerned with the effects of various variables upon the probability that an offender will be adjudicated guilty. The stated egalitarian ideals of the legal system, as well as the objectives of retribution and deterrence require that the assignment of

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96 Lemert, pp. 42-43.
criminal status be based upon the nature of the criminal offense and upon
the offender's previous criminal history, and that this assignment
process be blind to the offender's social position and other socio-
biographical attributes. On the other hand, the objective of rehabilitation
is consistent with granting judges more discretion so that they may take
socio-biographical characteristics into account as they relate to the
likelihood of an offender rehabilitating himself under a deferred sentence.

Writers from the power and conflict perspective on criminaliza-
tion, and other observers of the legal process as well, have maintained
that the actual process of assigning criminal status is inconsistent
with either of the above ideals. According to these writers the assign­
ment of criminal status is determined largely by the power, influence,
sophistication, and material resources of the offender. Additional
critical views are that the assignment of criminal status involves social
discrimination and substantial discrepancies between judges.

The present research has sought to provide a basis for evaluating
how well the legal system conformed to either the ideals of sentencing
ideologies or to the expectations of the critics. The method of research
has involved secondary analysis of data regarding the cases of 1553
probationers and 515 offenders (probationers and those sentenced to
prison) in the state of Montana. In this investigation contingency-table
analysis and multivariate modes of analysis were used in examining the
influence of various legal and socio-biographical characteristics of
offenders upon the conditional probability that certain types of offenders
were adjudicated guilty.

Replication of the analysis done in a previous study revealed that
the bivariate relationships in the data from Montana were similar to
those relationships observed in data regarding probationary sentences
in Florida. Multivariate analysis of the data sets from Montana pro­
vided a more detailed description of the data than did the contingency
table analysis done for purposes of replication.

The findings did not unequivocally support either the "ideal" models
of the assignment of criminal status or the power-conflict model and
expectations of discrimination. The major determinant of the assign­
ment of criminal status was the number of prior felony convictions.
Because of the size of the effect of this variable and the significant
effect of the type of offense, the assignment of criminal status seems
to be primarily consistent with the principle of equal treatment and the
objectives of retribution and deterrence.

This does not mean that the socio-biographical variables have
no effect. Net of the effects of the other variables, age, being a
native American, and being male increased the probability that an
offender was adjudicated guilty; education, being white, having depen­
dents, and being female decreased this probability. The effects of
the socio-biographical characteristics were quite small, and were
generally consistent with the expected consequences of the objective of rehabilitation. The only support given the power-conflict model came from the small effects of ethnicity and education. Being white and having a higher level of educational attainment did decrease the likelihood of having been assigned criminal status. However, although the effects of ethnic status upon the type of sentence were significant, they were not exerted through the effects of ethnicity upon education, employment status, and occupational skill, as expected under the power-conflict model.

Edward Green has described the present sentencing ideology in the United States as "neo-positivism," marked by concern for the objective of rehabilitation and a simultaneous (and sometimes over­riding) concern for deterrence and the protection of society. The dominant characteristics of the data examined are consistent with such a view. Thus, this sentencing ideology appears consistent with the major determinants of the assignment of criminal status. The power-conflict model, the theories of racial discrimination, and differences among judges may explain the small but significant discrepancies in this process.

Each of the socio-biographical variables explains only a very small amount of the variance in the adjudication of guilt. However, it

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97 Green, p. 3.
is very important to stress that although the socio-biographical variables are not the primary determinants of the assignment of criminal status, this does not mean that the effects of these variables are insignificant in terms of their consequences for the offenders. The size of the effects of these variables may still be large enough to constitute an injustice or to produce resentment on the part of those sentenced.

In order to appreciate the subjective significance of the effects of these variables, imagine that part of your future depends upon drawing a card from a deck of one hundred cards. The deck contains both white cards and black cards. If you draw a white card, you are given a deferred sentence; if you draw a black card, you are assigned the status "convicted felon." If you are white, you must draw from a deck containing 22 black cards; if you are a native American your deck contains 33 black cards. A person who is twenty years old draws from a deck with 20 black cards, compared to the thirty-five year old who draws from a deck with 35 black cards.

Also remember that the effects of the variables are additive, and that those characteristics which are disadvantages are usually associated with one another. The native American offender is likely to also have the disadvantage of a lower level of education and one or more prior felony convictions. Returning to our hypothetical game, a native American first-time offender who is thirty-five years old and who has a sixth-grade education draws from a deck containing 24 (the mean) +
9 (the effect of ethnicity) + 11 (the effect of age) + 2 (the effect of education) - 8 (the effect of having no prior felonies) = 38 black cards; a twenty-year old white first-time offender with a high school degree draws from a deck with 11 black cards. If we wish to take into account the fact that the various offender characteristics are associated with one another, the real (but not additive) consequences of having these characteristics are indicated by the gross effects of these attributes (Tables 2 and 4). Thus, the native American offenders studied drew from a deck containing on the average 18 more black cards than did the white offenders.

As unfair as the differentials associated with some of the socio-biographical characteristics may seem, the discrepancies between the judges involved are far more disturbing. Those offenders sentenced by the most severe judges drew from a deck containing 31 more black cards than did the offenders who were sentenced by the most lenient judges.

Some may object to drawing an analogy between the supposedly rational-legal process of sentencing and a game of chance. Unfortunately, the random appearance of the sentencing process is not dispelled by the fact that variables representing virtually all of the information included in the official files of the offenders studied could only account for 36 percent of the variance in the adjudication of guilt. Certainly, much of the unaccounted for variance may be due to measurement error and
variables which could not be measured. The demeanor and recalcitrance of the offenders was not measured and the seriousness of the offense is inadequately described by such categories as "burglary I." Nevertheless, the amount of consistency observed falls far short of that which might be desired. The amount of consistency in such sentencing might be improved if certain steps were taken in Montana, such as: (1) the establishment of sentencing discussions among judges, (2) more rigid guidelines for sentencing, and (3) quantitative feedback to judges, informing them of how their sentencing practices compare over the long run with those of the other judges in the state as a whole. Considering the importance of consistency, in terms of both justice and accomplishing the objective of deterrence, the legal system cannot afford having those it deals with believing that the assignment of criminal status is even partially determined by the throw of slightly weighted dice.


Heise, David R. "Employing Nominal Variables, Induced Variables, and Block Variables in Path Analyses," Sociological Methods and Research, 1, No. 2 (November, 1972), pp. 147-73.


